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**SAINT  
CLOUD  
STATE  
COLLEGE  
GRADUATE BULLETIN**

**1962**

**63**

# *St. Cloud State College*

*St. Cloud, Minnesota*

1962 - 1963

## *Graduate Bulletin*

St. Cloud State College is a member of the American Council on Education, of the North Central Association of Colleges and Secondary Schools, and of the American Association of Colleges for Teacher Education. It is accredited by the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education.

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Number 3

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# Calendar for Graduate Students

## 1962 - 1963

### Spring Quarter 1962

#### MARCH

- 20 Registration, including check-out and payment of fees.
- 21 Classes begin. Late fee of \$1 added to registration fee statements, cumulative at the rate of \$1 per day through the 10th class day. Penalty of \$1 added for each change in registered schedule.

#### APRIL

- 2 Application for Graduation due from students, and Certificates of Readiness for graduation due from their faculty advisers.
- 3 Late registration and change of course privilege end. Spring Quarter fee payments not accepted after this date.
- 9 Monday through Thursday, April 19 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.
- 20 Good Friday (holiday).

#### MAY

- 30 Memorial Day (holiday).

#### JUNE

- 8 Official closing of Spring Quarter at 5 p.m.
- 9 Annual Commencement Exercises at 11 a.m.

### First Summer Session 1962

#### JUNE

- 11 Registration, including check-out and payment of fees.
- 12 Classes begin. Late fee of \$1 added to registration fee, cumulative at the rate of \$1 per day through June 18. Penalty of \$1 added for each change in registered schedule.
- 18 Applications for Graduation due from students, and Certificates of Readiness for Graduation due from their faculty advisers.
- 18 Late registration and change of course privilege end. Fees not accepted after this date.
- 25 Monday through Thursday, July 5 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.

#### JULY

- 4 Independence Day (holiday).
- 13 Official closing of First Summer Session at 5 p.m.

## **Second Summer Session 1962**

### **JULY**

- 16 Registration, including check-out and payment of fees.
- 17 Classes begin. Late fee of \$1 added to registration fee, cumulative at the rate of \$1 per day through July 24. Penalty of \$1 added for each change of registered schedule.
- 23 Applications for Graduation due from students, and Certificates of Readiness for Graduation due from their advisers.
- 23 Late registration and change of course privilege end. Fee payments not accepted after this date.

### **AUGUST**

- 6 Monday through Thursday, August 16 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.
- 17 Official closing of Second Summer Session at 5 p.m.

## **Fall Quarter 1962**

### **SEPTEMBER**

- 17 Faculty Day. General and Special meetings.
- 21 Registration, including check-out and payment of fees.
- 24 Classes begin. Late fee of \$1 added to registration fee, cumulative at the rate of \$1 per day through the 5th class day. Penalty of \$1 added for each change in registered schedule.
- 28 Late registration and change of course privilege end. Fee payments not accepted after this date.

### **OCTOBER**

- 5 Applications for Graduation due from students, and Certificates of Readiness for Graduation due from their faculty advisers.
- 8 Monday through Thursday, October 18 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.
- 18-19 Minnesota Education Association Meeting.

### **NOVEMBER**

- 21 Wednesday noon through Sunday, November 25 — Thanksgiving recess.
- 26 Classes resume.

### **DECEMBER**

- 14 Official closing of Fall Quarter at 5 p.m.

## **Winter Quarter 1962-63**

### **JANUARY**

- 2 Registration, including check-out and payment of fees.
- 3 Classes begin. Late fee of \$1 added to registration fee cumulative at the rate of \$1 per day through the 5th class day. Penalty of \$1 added for each change in registered schedule.

- 9 Late registration and change of course privilege end. Fee payments not accepted after this date.
- 14 Applications for Graduation due from students, and Certificates of Readiness for Graduation due from their faculty advisers.
- 21 Monday through Thursday, January 31 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.

#### MARCH

- 15 Official closing of Winter Quarter at 5 p.m.

### Spring Quarter 1963

#### MARCH

- 18 Registration, including check-out and payment of fees.
- 19 Classes begin. Late fee of \$1 added to registration fee, cumulative at the rate of \$1 per day through the 5th class day. Penalty of \$1 added for each change in registered schedule.
- 25 Late registration and change of course privilege end. Fee payments not accepted after this date.

#### APRIL

- 1 Applications for Graduation due from students, and Certificates of Readiness for Graduation due from their faculty advisers.
- 12 Good Friday (holiday).
- 15 Monday through Thursday, April 28 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.

#### MAY

- 30 Memorial Day (holiday).

#### JUNE

- 7 Official closing of Spring Quarter at 5 p.m.
- 8 Annual Commencement Exercises at 11 a.m.

### First Summer Session 1963

#### JUNE

- 10 Registration, including check-out and payment of fees.
- 11 Classes begin. Late fee of \$1 added to registration fee, cumulative at the rate of \$1 per day through June 17. Penalty of \$1 added for each change in registered schedule.
- 17 Applications for Graduation due from students, and Certificates of Readiness for Graduation due from their faculty advisers.
- 17 Late registration and change of course privilege end. First Summer Session fees not accepted after this date.
- 24 Monday through Wednesday, July 3 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.

## JULY

- 4 Independence Day (holiday).
- 12 Official closing of First Summer Session at 5 p.m.

## Second Summer Session 1963

## JULY

- 15 Registration, including check-out and payment of fees.
- 16 Classes begin. Late fee of \$1 added to registration fee, cumulative at the rate of \$1 per day through July 22. Penalty of \$1 added for each change in registered schedule.
- 22 Applications for Graduation due from students, and Certificates of Readiness for Graduation due from their faculty advisers.
- 22 Late registration and change of course privilege end. Fee payments not accepted after this date.
- 29 Monday through Thursday, August 8 — Entrance test battery, mandatory for all graduate students. Reservations made at Student Personnel Office.

## AUGUST

- 16 Official closing of Second Summer Session at 5 p.m.

# Administrative Organization for Graduate Study

## State College Board

Norman H. Nelson, Moorhead, President	<i>Resident Director</i>
Charles F. Mourin, Aurora, Vice President	<i>Director</i>
Erling O. Johnson, State Commission of Education, St. Paul, Secretary	<i>Member, Ex-Officio</i>
Helen M. Conway, St. Paul, Treasurer	<i>Director</i>
Roy C. Prentis, St. Paul	<i>Executive Director</i>
S. J. Kryzsko, Winona	<i>Resident Director</i>
Herbert E. Olson, Bemidji	<i>Resident Director</i>
W. K. Jones, Olivia	<i>Director</i>
F. Kelton Gage, Mankato	<i>Resident Director</i>
L. K. McLeland, St. Cloud	<i>Resident Director</i>

## Administrative Staff

George F. Budd	President
Charles L. Balcer	Dean of Academic Administration
Irvamae Applegate	Associate Dean for Teacher Education
Luther D. Brown	Director, Bureau of Instructional Resources
Marvin E. Holmgren	Coordinator of Graduate Studies
Brendan J. McDonald	Registrar
Jack M. White	Assistant to the President
Robert G. Zumwinkle	Dean of Students

## Graduate Council

George F. Budd, President	<i>Ex-Officio</i>
Charles L. Balcer, Dean of Academic Administration	<i>Ex-Officio</i>
Irvamae Applegate, Associate Dean for Teacher Education	<i>Ex-Officio</i>
Marvin E. Holmgren, Coordinator of Graduate Studies	<i>Ex-Officio</i>
Floyd O. Gilbert, Division of Psychology	Term expires 1964
George Serdula, Division of Health and Physical Education	Term expires 1963
Carl J. Folkerts, Division of Social Sciences	Term expires 1962

## Instructional Divisions

Arts and Music	Raymond H. Larson, Chairman
Business	Clair E. Daggett, Chairman
Education	Irvamae Applegate, Chairman
Health and Physical Education	Albert F. Brainard, Chairman
Language and Literature	Thearle A. Barnhart, Chairman
Mathematics and Science	Arthur F. Nelson, Chairman
Psychology	Frank B. Slobetz, Chairman
Social Sciences	James G. Harris, Chairman



# Graduate Faculty

Adams, Algalee, Ed. D., Pennsylvania State University  
Anderson, Rowland C., Ed. D., Columbia University  
Applegate, Irvamae, Ph. D., University of Minnesota  
Balcer, Charles, Ph. D., State University of Iowa  
Ball, Lyle, Juris D., University of North Dakota  
Banta, Josephine, Ph. D., University of Michigan  
Barker, S. Hugh, Ph. D., University of Wisconsin  
Barnhart, T. A., Ph. D., Ohio State University  
Barrett, Roger, Ed. D., State University of Iowa  
Bleck, Frances A., P. E. D., Indiana University  
Brainard, A. F., Ed. D., New York University  
Brown, Luther, Ph. D., George Peabody College  
Brown, Robert, Ph. D., University of Chicago  
Budd, George F., Ed. D., Columbia University  
Cairns, Paul, Ph. D., University of Michigan  
Cates, Edwin H., Ph. D., State University of Iowa  
Clugston, Herbert A., Ph. D., University of Colorado  
Coard, Robert L., Ph. D., University of Illinois  
Daggett, Clair E., Ph. D., State University of Iowa  
Davis, James, Ph. D., University of Minnesota  
Dedmon, Donald, Ph. D., State University of Iowa  
Emery, Charles W., Ed. D., Colorado State College of Education  
Erickson, John, Ph. D., Iowa State University  
Folkerts, Carl J., Ph. D., State University of Iowa  
Gilbert, Floyd O., Ed. D., University of North Dakota  
Goehring, Harry H., Ed. D., University of North Dakota  
Gower, Calvin W., Ph. D., University of Kansas  
Grunerud, James A., Ph. D., University of California  
Hanson, Robert, Ph. D., State University of Iowa  
Harris, James G., Ph. D., University of Missouri  
Holloway, Ralph, Ph. D., State University of Iowa  
Holmgren, Marvin E., Ph. D., University of Minnesota  
Hopkins, Harold, Ph. D., University of Nebraska  
House, James B., Ph. D., Ohio State University  
Housman, Arthur, Ph. D., State University of Iowa  
Ingwell, Paul, Ph. D., University of Minnesota  
Jelden, David, Ed. D., University of Missouri  
Kasper, John, P. E. D., Indiana University  
Krueger, Albert, Ph. D., University of Wisconsin

Laakso, John W., Ph. D., University of Minnesota  
 Larson, Raymond H., Ph. D., University of Minnesota  
 Laudon, Robert, M. A., University of Minnesota  
 Lieberman, Harold, Ph. D., Syracuse University  
 Lohmann, Victor L., Ed. D., University of Missouri  
 Lohrman, Herbert P., Ph. D., Ohio State University  
 Luker, Albert, Ed. D., Colorado State College  
 McDermott, Richard, M. A., Ohio State University  
 Markwardt, Frederick, Ph. D., University of Minnesota  
 Marvel, Lorene, Ed. D., Columbia University  
 Menninga, Fred T., Ed. D., University of North Dakota  
 Mertens, Gerard M., Sc. D., University of Vienna, and Ph. D., University  
 of Michigan  
 Michael Keith, M. F. A., State University of Iowa  
 Michaelson, Merle E., Ph. D., University of Minnesota  
 Mork, Vernon N., Ed. D., University of North Dakota  
 Morse, Marjorie J., Ph. D., University of Wisconsin  
 Nash, Edwin A., Ph. D., State University of Iowa  
 Nash, Richard, Ed. D., University of Colorado  
 Nelson, Arthur F., Ph. D., State University of Iowa  
 Netzer, Donald, Ph. D., University of Illinois  
 Partch, Max L., Ph. D., University of Wisconsin  
 Perry, Floyd, Ed. D., Colorado State College of Education  
 Peterson, Lars, Ed. D., University of Wyoming  
 Pike, Albert, Ph. D., University of Oregon  
 Pollock, Donald G., Ed. D., University of Colorado  
 Rawland, Perry, Ph. D., University of Minnesota  
 Riggs, Ronald G., Ed. D., University of North Dakota  
 Sahlstrom, Stanley, Ph. D., University of Minnesota  
 Schelske, Alvin H., Ed. D., Columbia University  
 Serdula, George, H. S. D., Indiana University  
 Slobetz, Frank B., Ed. D., University of Missouri  
 Smith, Lewis C., Jr., Ph. D., State University of Iowa  
 Thompson, Marvin, Ph. D., University of Minnesota  
 Vandell, Roland A., Ed. D., University of North Dakota  
 Van Nostrand, M. Eugene, Ph. D., Boston University  
 Waugh, Harvey R., M. A., State University of Iowa  
 Wick, Robert H., Ph. D., State University of Iowa  
 Worthington, Martha, Ph. D., Tulane University  
 Youngner, Philip, Ph. D. University of Wisconsin  
 Zaeske, Arnold, Ed. D., University of Missouri  
 Zumwinkle, Robert G., Ph. D., University of Minnesota

# General Information

## History

St. Cloud State College was established in September, 1869, as the Third State Normal School. In 1894 the name was changed to the St. Cloud State Normal School. Until 1898 the St. Cloud State Normal School was essentially a secondary school, with a few students of college grade after 1894. From 1898 to 1912, the St. Cloud State Normal School was a 4-year high school plus 2 years of college. During World War I, the high school classes were gradually eliminated, and until 1925 the school operated primarily as a 2-year college. The name of the institution was changed in 1921 to St. Cloud State Teachers College.

The year 1926-27 marks the beginning of a new era in the history of the college, for then the 4-year course leading to a baccalaureate degree was organized. The first 2 degrees were conferred in 1928.

Since the close of World War II the college has undergone a period of tremendous expansion, both in enrollment and in curricular offering. A liberal arts program was introduced in 1946, and in 1948 certain preprofessional programs were added. In 1957, the name of the institution was changed to St. Cloud State College. In spite of these additions and changes, the college has continued to be primarily a teacher-preparing institution. Through revision of the teacher-education curriculums and the addition of the psychological services center, extension classes, and graduate study, the college has sought constantly to improve its services to teachers during both their initial preparation and their in-service professional growth.

## Location

The campus is situated in the southeastern residential section of St. Cloud, Minnesota. The main campus has a beautiful location overlooking the Mississippi River. The city of St. Cloud, with a population of some 35,000, is located about 70 miles northwest of the Twin Cities.

## Accreditation

St. Cloud State College is accredited by the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education.

## Veterans' Benefits

Veterans' benefits are available to graduate students who are veterans of the Korean War or are eligible for the War Orphans Bill.

These veterans may use the educational benefits provided by P.L. 550, for the regular veteran, or P.L. 894, for the veteran who qualifies for disability benefits, or P.L. 634, for the student who qualifies for war orphans benefits.

Application for veteran's benefits should be made at either the nearest veterans' office or with the Dean of Men at this college.

Housing for married veterans is available at a low rental rate. Application forms can be obtained by writing to the Director of Housing.

### **Part-Time Employment**

There are many opportunities for students who desire part-time employment. A limited number of these are available on campus. The Office of Student Personnel Services will assist graduate students who need part-time employment.

Graduate students who carry the full academic load should not plan to devote any time to outside employment. In cases where it is necessary to devote time to outside employment, the student's academic load should be reduced accordingly.

### **Living Accommodations**

The college operates 5 residence halls for women and 1 for men. Application for rooms, with an accompanying deposit of \$10.00, should be addressed to the Director of Housing. Additional information about the college-operated residence halls can be obtained by consulting the general college catalog or by directing correspondence to the Director of Housing.

Many college-approved homes located near the campus provide accommodations for living quarters or rooms equipped for light house-keeping.

The college provides 48 housing units for married veterans. The date of application and number of dependents will be considered in making assignments.

Requests for application forms for housing units should be directed to the Director of Housing.

### **Health Service**

Graduate students enjoy the same Health Service privileges as the undergraduate students. Preventive and remedial health services are provided. These services include physical examinations, communicable disease control measures, some laboratory services, consultation concerning individual health problems, some hospital and medical care, and health education.

## **Placement Service**

The college operates a Placement Service which assists superintendents and school boards in obtaining accurate information concerning the character, personality, preparation, and experience of students and graduates of St. Cloud State College. Information that is collected is kept on file permanently.

Placement services are available to graduate students after they have completed 20 quarter hours of graduate work in residence at this college. This restriction does not apply to those students who have qualified for placement service as undergraduates of the college.

Whenever possible, the Placement Service informs eligible students about openings. It submits in confidence to employing officials and to other institutional placement bureaus any data which it possesses concerning candidates and it assists graduate students in obtaining positions.

## **Co-curricular Activities**

Graduate students are invited to participate in undergraduate activities (including orchestra, band, and vocal music groups) which do not involve intercollegiate competition.

The college has an Intramural Athletic Department that offers all students opportunities to participate in recreational activities of an athletic nature.

The artists course brings to the campus a variety of entertainment furnished by nationally recognized artists representing music, dance, drama, and lecture. There is usually one such evening program each month throughout the year. The programs are financed by the student activity fee; there is no admission charge.

Opportunities for participation in student activities cover a large area of interests. Graduate students are urged to maintain a well-balanced co-curricular program to supplement their academic endeavors.

# Graduate Study at St. Cloud State College

## History

In 1953 the Minnesota State Legislature authorized the state's teachers colleges to offer the fifth year of work in teacher education leading to an appropriate graduate degree. As a result, a program of graduate study leading to the degree of Master of Science in Education was inaugurated at St. Cloud State College during the summer of 1953.

## Accreditation

The Graduate Program offered by St. Cloud State College is accredited by the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education.

## General Purposes

The program of graduate studies is adapted to the increased maturity, the richer background, the stronger professional motivation, and the greater range of intellectual interests which characterize post-baccalaureate students who are accepted as candidates for the advanced degree at this college. The program is planned cooperatively by learner and teacher and is rooted in the important aspects of study which find focus in the recognition and definition of a problem, gathering of data, and interpretation and application of the learnings secured.

Emphasis is placed on directed reading, techniques of primary investigation, independent and constructive thinking. High standards of performance in the ability to organize and evaluate evidence and defend conclusions are required.

The purposes of graduate study at this college are:

- a. To develop to the optimum degree the professional ability of teachers, administrators, and counselors who show promise of becoming superior professional workers. The program is designed to meet the needs of those who wish to continue preparation in their major fields by extending and augmenting their professional and cultural understandings and skills.
- b. To provide for the concentrated study of the more strictly professional phases of preparation for teaching for students whose undergraduate study did not provide for those phases.



- c. To develop appreciations, attitudes, and understandings characteristic of educated persons.
- d. To provide some preparation and experience in educational research to the end that sensitivity to change and an attitude of intelligent inquiry may be fostered.

## **Administration of the Graduate Program**

Responsibility for the administrative direction of the graduate program is delegated by the President of the college to the Graduate Council. The membership of the Graduate Council consists of the President, the Dean of Academic Administration, the Associate Dean for Teacher Education, the Coordinator of Graduate Studies, and three elected members of the Graduate Faculty. The Coordinator of Graduate Studies serves as the executive officer of the Graduate Council.

The functions of the Graduate Council include approval of applications for admission to graduate study, making recommendations concerning graduate courses, aiding students in the selection of advisers, acting on applications for admission to candidacy for the Master's degree, formulation of general policy, and routine administration of the graduate program.

The Graduate Faculty serves as the legislative body for the graduate program. Specifically, the Graduate Faculty acts on proposals for curriculum change, takes final action on the awarding of the Master's degree, studies the broad aspects of the graduate program, and effects major changes in the graduate program within the framework defined by the Minnesota State College Board.

# Admission to Graduate Study

Students seeking admission to Graduate study must complete the application form and submit it to the Coordinator of Graduate Studies. Two copies of official transcripts of undergraduate work are required upon entrance. Graduate credits earned at other institutions will be accepted only when supported by complete official transcripts that indicate that credits were earned at the graduate level. All transcripts must be sent directly from the college where the credits were earned.

An applicant will be granted unconditional admission to graduate study:

1. If he holds a baccalaureate degree in teacher education from a college or university accredited by the National Council for Accreditation of Teacher Education, or the appropriate regional accrediting agency, or from a college recognized by the state university of the state in which the college or university is located; and
2. If his senior college honor point ratio is 2.7 (B minus) or higher; and
3. If his application is approved by the Coordinator of Graduate Studies in accordance with the regulations of the Graduate Council.

An applicant will be granted conditional admission to graduate study under certain conditions. Among these conditions are the following:

1. The student holds a baccalaureate degree from an unaccredited college.
2. The student's senior college honor point ratio is lower than 2.7.
3. The student has not submitted all of the required admissions information and the supporting transcripts.
4. The student has 12 quarter hours or less to complete for graduation with the bachelor's degree in education.

When a student is admitted conditionally, his application for admission to graduate study will be reconsidered after he has completed 15 quarter hours of graduate work at this college, or when the deficiency has been removed. If the student fails to maintain a "B" average during this probationary period, he will be denied further registration.

Admission to graduate study does not guarantee candidacy for the Master's degree. A student may take graduate courses without intending to qualify for the Master's degree. In any case where the student is taking courses for graduate credit, the regulations governing graduate study in this college apply.

## **Credits Transferable**

St. Cloud State College will allow the transfer of 9 quarter hours of graduate work satisfactorily completed at other accredited colleges or universities and/or extension credit earned at this college. However, a maximum of 15 quarter hours of on-campus graduate credit may be transferred from another Minnesota State College. Furthermore, where National Science Foundation or National Defense Education Act institute credits are involved, a maximum of 15 quarter hours may be transferred. In no case will the maximum amount of credit accepted in transfer from any combination of sources exceed 15 quarter hours.

Graduate courses in which a grade of "C" or lower was earned will not be accepted in transfer.

Graduate credit will not be allowed for credits earned through correspondence study.

Transfer credit at the graduate level will be allowed only on the basis of work taken at institutions qualified to give graduate work at the time the credit is earned and then, on the basis of the appropriateness of the transfer credits to the student's graduate study program.

After the student has been accepted as a candidate for the Master's degree, no transfer credit will be accepted unless the student has the prior approval of (1) his adviser and (2) the Graduate Council.

## **Appointment of Adviser**

After the application for admission has been acted upon by the Coordinator of Graduate Studies, the applicant will be referred to the appropriate Division or Department Chairman for the appointment of an adviser. Insofar as possible the student's choice of adviser will be considered.

Temporary advisers may be appointed in those cases where either the student or the Division (or Department) Chairman is uncertain of the appropriateness of a permanent appointment. Action will be taken to assign a permanent adviser when the student applies for candidacy for the Master's degree.

The adviser will help the student formulate a plan of study leading toward the accomplishment of the student's objectives in pursuing graduate study.

## **Registration**

Graduate students are expected to register during the regular registration period at the beginning of each quarter or summer session (see calendar).

Registration will not be permitted after (1) the second week of the quarter or (2) the first week of the summer session.

Arrangements for registration are made through the office of the Coordinator of Graduate Studies.

The course entitled "Introduction to Research" (English 515) is required of all candidates for the Master's degree. Since the content of this course is considered to be very helpful in all graduate-level courses, students are required to register for, and complete, the course during their first 10 quarter credits of work here. In addition, this course is prerequisite to, or must be taken concurrently with, the courses included in the Professional Core.

The last eight quarter hours of the student's program must be earned in residence at St. Cloud State College.

## **Course Load**

The normal student load per quarter is 15 quarter hours for the regular year. By petitioning for it, a student may be permitted to carry a load of 16 quarter hours.

During the Summer Quarter, the normal load is also 15 quarter hours. A student who enrolls for only one summer session will be permitted to carry 8 quarter hours without petition. A student who desires to carry 8 quarter hours during each of the 2 sessions of a Summer Quarter must petition for permission to carry the extra credit.

Requests for permission to carry loads in excess of 16 quarter hours per quarter or 8 quarter hours per summer session will not be approved.

Teachers who enroll in on-campus graduate courses while carrying a full-time teaching load are permitted to enroll for no more than 6 quarter hours per quarter; the maximum load for those who enroll in off-campus graduate courses is 4 quarter hours per quarter.

## **Course Numbering System**

Courses numbered 500-599 inclusive are courses that may be included in graduate programs. Some of these courses carry a double number. Advanced undergraduate students as well as graduate students may enroll in such courses. Courses that carry only a 500 number are for graduate students only.

Only 500 level courses will be accepted for graduate credit.

## **Marks**

The following marks are used in reporting the caliber of the graduate student's achievement in all courses except the Master's Project: A (ex-

cellent), B (good), C (acceptable), and D (unsatisfactory). When the student has completed all of the requirements for the Master's Project, his adviser will submit a grade of "S" (satisfactory).

Students who withdraw officially from a class prior to the mid-term period will be reported "withdrawn" (W). After the mid-term period students who withdraw and are doing satisfactory work will be reported "withdrawn satisfactory" (WS); students whose work is failing at the time of official withdrawal from class will be reported "withdrawn unsatisfactory" (WU), provided the withdrawal occurs prior to the expiration of two-thirds of the class meetings. After that time a mark of "D" will be recorded.

With the exception of the Master's Project, courses not completed during the regularly scheduled period will be recorded as "Incomplete." Such "Incomplete" must be removed by the student within a year in order to receive credit for the course.

If the student has not met all of the requirements of the Master's Project by the end of the quarter or session in which it was registered, the Project will be reported as "In Progress." The Master's Project must be completed within the 7-year time limit set for the completion of the Master's degree.

Graduate students, accepted as candidates for the Master's degree, whose records show less than a "B" average at the completion of the approved program of courses will be permitted to register for a maximum of 8 additional quarter hour credits to be earned in courses approved by the Graduate Council. If, after the completion of these 8 additional credits, the student has less than a "B" average, he may be denied further registration at the graduate level.

## **Standard of Scholarship**

Candidates for the degree must maintain a "B" average. Courses in which a mark below "C" was earned will not be accepted for graduate credit.

The Graduate Council may refuse further registration on the basis of unsatisfactory scholarship.

## **Auditors**

Auditors may enroll for courses by securing the permission of the instructor of the course and the Coordinator of Graduate Studies. Auditors pay the regular fees.

Auditors are not permitted to take the course examinations nor will they be given credit for the courses audited.

## Fees

Tuition fees for on-campus courses:

Residents .....	\$5.00 per quarter credit
Non-residents .....	7.50 per quarter credit

Tuition fees for off campus courses:

Residents and non-residents .....	\$7.50 per quarter credit
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Student activity fee:

Regular school year: (per quarter)

6 credits or less .....	None
More than 6 credits .....	\$10.00

Summer sessions: (per session)

4 credits or less .....	None
More than 4 credits .....	\$ 5.00

Student union fee:

Regular school year (per quarter)

6 credits or less .....	None
More than 6 credits .....	\$ 5.00

Summer sessions: (per session)

4 credits or less .....	None
More than 4 credits .....	\$ 2.50

Registration is not considered completed until all fees have been paid. Students who have not completed registration prior to the beginning of classes will be assessed a Late Registration Fee of \$1 per day, cumulative until registration is completed.

A fee of \$1 is charged students who desire to alter their programs after classes begin.

## The Summer Session

Opportunities are provided for graduate work to teachers in service who are interested in continuing their education. Although the number of regular-year students who attend the summer sessions is increasing, most of the summer session students are teachers in service. Credits earned during the summer sessions may be applied toward the fulfillment of requirements for the Master's degree in the same manner, and subject to the same regulations, as credits earned during the academic year.

The maximum student load is eight quarter hours per summer session.

The Summer Session Bulletin contains the course schedules, the cost of attendance, information about special features, and other information of interest to those who wish to spend a profitable summer in a pleasant atmosphere. Copies of the bulletin may be obtained by writing to the Registrar of the college.



## **Evening Classes**

St. Cloud State College offers a number of graduate courses on campus during evenings of the regular school year. These courses may be used to satisfy Master's degree requirements.

Teachers who enroll in on-campus graduate courses while carrying a full-time teaching load are permitted to enroll for no more than 6 quarter hours.

For additional information about these courses, write to the Coordinator of Graduate Studies.

## **Library Facilities**

The David L. Kiehle Library is a masterpiece of planning to provide the best possible combination of beauty, comfort, and utility. In addition to reserve and reference reading rooms, it includes a curriculum laboratory, conference rooms, library science classrooms, a recreational reading room, independent study rooms, and listening areas. Modern copying devices, micro-card and micro-card readers, micro-film and micro-film readers-printers, are available to assist students in their research endeavors. The Audio-Visual Center, which is located in the library building, includes two classrooms with complete audio-visual facilities, central offices, a photographic dark room, and individual listening booths.

The floor plans of the David L. Kiehle Library emphasize easy access to the book shelves instead of the traditional separation of book stacks from reading rooms. Library holdings consist of approximately 109,000 volumes. Approximately 625 periodicals are currently received. In all aspects the keynote is service to students and staff.

# The Master's Degree

## Names of Degrees

The satisfactory completion of a graduate study program at St. Cloud State College culminates in the conferring of the degree of either (1) Master of Science in Education or (2) Master of Science in Rehabilitation Counseling. These are the only graduate degrees that are awarded by the college at the present time.

## Requirements for the Degrees

In order to be awarded the degree of Master of Science in Education the candidate must have met the following requirements:

1. He must have earned a minimum of 45 quarter hours of creditable graduate work of which at least one half must have been earned in courses taught by faculty members having earned doctorates.
  - a. He must have earned at least 18 quarter hours in his Major.
  - b. He must have earned a minimum of 9 quarter hours in Professional Education. (See Required Professional Core.)
  - c. He must have earned a minimum of 9 quarter hours in General Studies which includes Introduction to Research (English 515), 2 credits. Courses taken in General Studies must be taken in areas other than that of the Major and Professional Education.
2. He must have satisfactorily participated in his Qualifying Conference (See Admission to Candidacy for the Master's Degree) prior to the date that he registers for the last 15 quarter hours of his Master's degree program.
3. He must have satisfactorily completed the requirements for the Master's Project.
4. He must have made application for graduation at the beginning of the quarter or session during which he expects to complete the work for the Master's degree.
5. He must have participated satisfactorily in the Final Evaluation Procedure.

Requirements for the degree of Master of Science in Rehabilitation Counseling are given on pages 41-42.

## Required Professional Core

As prescribed, candidates must take 3 of the following courses:

1. Theories of Learning (Psychology 563) 3 credits

2. Statistical Methods in Education and Psychology (Psychology 578) 3 credits
3. Problems in American Education (Education 559) 3 credits
4. Elementary School Curriculum (Education 560) 3 credits  
or  
Secondary School Curriculum (Education 561) 3 credits
5. Human Relations (Education 567) 3 credits
6. Philosophy of Education (Education 569) 3 credits

Only one of the two curriculum courses may be counted toward the completion of the Professional Core requirements.

### **Admission to Candidacy for the Master's Degree**

A student who desires to earn the Master's degree must file an application for admission to candidacy with the Coordinator of Graduate Studies and participate in the Qualifying Conference for candidacy prior to the date that he registers for the last 15 quarter hours of his graduate program. The application forms, to be filled out in duplicate can be obtained at the Graduate Studies office. The application should be made after the student has satisfactorily completed at least 12 quarter hours of graduate work at this college.

All deficiencies must have been removed before admission to candidacy for the degree will be granted. In addition, prior to admission to candidacy for the degree, a student must have met the undergraduate requirements of the college in the field in which he expects to do his graduate work.

The Qualifying Conference will be conducted by the Graduate Council and the applicant's adviser.

In addition to the outline of courses that he proposes to use in the completion of course requirements for the Master's degree, the student will submit the plans for the Master's Project for approval by the Graduate Council at the Qualifying Conference. After the Master's Project plans have been approved, the Council will appoint the student's Project Committee.

Admission to candidacy will be contingent on evidence of personal and professional fitness and preparation for the Master's degree as well as on demonstrated ability to do satisfactory and creditable work at the graduate level. The following factors will be considered by the Graduate Council in determining each student's qualification for candidacy for the degree:

1. The student's undergraduate record.
2. The record of the student's work in graduate courses given by this college.

3. The student's work in graduate courses given by other institutions as recorded in official transcripts.
4. A general college aptitude test at the graduate level.
5. A standardized English test.
6. A personality inventory.
7. A speech test.
8. The Qualifying Conference.
9. The recommendation of the adviser.

The Graduate Council may deny admission to candidacy, or may refuse further registration, on the basis of unsatisfactory scholarship or other evidences of unfitness for teaching. In cases where the Graduate Council is in doubt concerning the student's qualifications, it may make recommendations for the correction or removal of weaknesses. In such cases, acceptance for candidacy will be delayed until satisfactory evidence of the student's qualifications has been submitted to the Council.

### **Master's Project**

Each graduate student must be able to (1) define problem areas; (2) locate and identify material relevant to the problem; (3) interpret and evaluate the material; and (4) report the findings in a logical and intelligible form.

Evidence of the mastery of these skills will be shown by the completion of a Master's Project, including a written Project Report.

The Master's Project carries 3 quarter hours of graduate credit.

The following regulations govern the preparation of the Master's Project:

1. The student shall submit the plans for the Master's Project for action by the Graduate Council at the Qualifying Conference.
2. The Master's Project shall be carried out under the supervision of the Project Committee, appointed by the Graduate Council at the Qualifying Conference, and consisting of the student's adviser and another graduate faculty member chosen on the basis of his potential advisory value in the area of the Master's Project. The Project Committee shall be included in the membership of the student's Final Evaluation Procedure committee.
3. The student will register for Master's Project in the same manner as he registers for classwork; he may register for 1, 2, or 3 credits per quarter or summer session, but he must have completed a total of 3 credits in Master's Project before the degree will be granted.

4. The satisfactory completion of the Master's Project will be reported as "S" (satisfactory). If all requirements for the Master's Project have not been met by the end of the quarter or session in which it was registered, the work will be reported as "In Progress." The Master's Project must be completed within the 7-year time limit set for the completion of the Master's degree.
5. The original and first duplicate copy of the Project Report shall be filed with the Graduate Council no later than 2 weeks before completion of the work for the Master's degree, but before the Project Report is submitted, it must have the approval of the Project Committee. When the final evaluation committee has approved the Project Report in its final form, the original and first carbon copy shall be submitted to the College Bookstore for binding. Both copies shall be bound in black buckram covers, and the title shall be printed in gold lettering on the front cover and back edge.
6. Two copies of an abstract of not more than 500 words shall accompany the Project Report; this abstract shall have the approval of the Project Committee.
7. Standards for the preparation of the Project Report are those embodied in *Form and Style in Thesis Writing*, written by William G. Campbell, and published by Houghton Mifflin (1954).

## **Time Limit**

All credits used in meeting requirements for the Master's degree must be earned within 7 years of the awarding of the degree.

## **Teaching Experience**

Some experience in teaching before the awarding of the degree of Master of Science in Education is regarded as being highly desirable. Candidates for the degree under some of our programs are required to have at least one year of teaching experience before admission to candidacy will be approved.

## **Application for Graduation**

A candidate for the Master's degree must file an application for graduation with the Coordinator of Graduate Studies at the beginning of the quarter or session during which he plans to complete work for the degree. This application must be approved by the adviser.

## **Final Evaluation Procedure**

During the final quarter or session of his graduate program, each candidate for the Master's degree is required to perform successfully (1) on a written comprehensive examination and (2) in an evaluation conference.

The written comprehensive examination, covering the areas of the student's preparation, is prepared under the direction of the Graduate Council by the student's final evaluation committee.

The Graduate Faculty is represented at the final evaluation conference by no less than five members, including the student's Project Committee. The Graduate Council appoints the final evaluation committee after the student has filed his application for graduation. Graduate faculty members are appointed from each of the 3 fields in the student's graduate program. The Graduate Council is also represented at this conference. Other interested faculty members are encouraged to attend.

The Final Evaluation Procedure has the following purposes:

- a. provide an additional basis for determining the candidate's qualifications for the Master's degree;
- b. help the student synthesize his graduate study experience;
- c. continue the process of educating the student in his professional rights and obligations;
- d. aid the student in making plans for his future professional growth and service; and
- e. discover problem points in the graduate program that need continued study and improvement.

## **Conferring of Degrees**

Degrees are conferred at the close of each quarter. Commencement exercises are held only at the end of the Spring Quarter. Attendance at these exercises is not compulsory; interested graduate students are urged to contact the Coordinator of Graduate Studies for detailed information about the annual commencement exercises.



# Summary of Requirements for the Master's Degree

Procedure	Under Direction of	Date
Application for admission to graduate study, together with necessary official transcripts of college work	Coordinator of Graduate Studies	Prior to enrollment; at earliest convenience
Appointment of Adviser	Division Chairman	Prior to enrollment
Registration	Adviser	See Calendar
Take qualifying test battery	Director, Psychological Services Center	During first quarter or session
Take speech test	Member, Speech Department	During first quarter or session
Remedial work, if recommended as result of qualifying test battery or speech test	A designated member of the faculty	Upon recommendation; to be continued until remediation is effected
Application for candidacy for Master's degree	Adviser and Coordinator of Graduate Studies	After completion of 12 credits of graduate work at this college
Develop preliminary plans for Master's Project	Adviser	Prior to Qualifying Conference
Qualifying conference for candidacy	Graduate Council and Adviser	Prior to registration for last 15 graduate credits
Acceptance as a candidate for the Master's degree	Graduate Council	After Qualifying Conference
Development of Master's Project	Project Committee	After acceptance as a candidate for the Master's Degree
Application for graduation submitted to Coordinator of Graduate Studies	Adviser	At beginning of last quarter or session
Submit Project Report to Graduate Council	Project Committee	Not later than two weeks before graduation
Final Evaluation Procedure	Graduate Faculty Committee, including the Project Committee	During final quarter or session
Commencement exercises (attendance is optional)	President	At end of Spring Quarter

# Fields of Concentration

## Program for Elementary School Teachers

In order to gain admittance to the graduate program with Elementary School Teaching as his Major, a student must be eligible for a Minnesota elementary school teacher's certificate.

The student must take a minimum of 6 quarter hours of graduate work in Elementary School Teaching at this college even though he has successfully transferred enough graduate credits to meet the minimum Elementary Major requirements.

A candidate for the Master's degree in Elementary School Teaching must have completed a minimum of 54 quarter hours (undergraduate and graduate) in professional education courses, and he must have met the following course requirements before the degree will be granted:

### I. Courses in Elementary School Teaching

- A. Prescribed: Master's Project, 3 credits.
- B. Electives: A minimum of 18 credits must be earned in courses designed specifically for teaching in the elementary school.

### II. Professional Education

- A. Professional Core: The minimum requirement is 9 credits earned in 3 of the following courses:
  - Ed. 559: Problems in American Education, 3 credits
  - Ed. 560: Elementary School Curriculum, 3 credits
  - Ed. 567: Human Relations, 3 credits
  - Ed. 569: Philosophy of Education, 3 credits
  - Psy. 563: Theories of Learning, 3 credits
  - Psy. 578: Statistical Methods in Education and Psychology, 3 credits
- B. Electives: Other professional education courses may be elected; the minimum number of elective credits needed will depend on what the student needs to meet the minimum of 54 undergraduate and graduate credits required in Professional Education.

### III. General Studies

- A. Prescribed course:
  - Eng. 515: Introduction to Research, 2 credits
- B. Electives: (Minimum: 7 credits)
  - Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Sociology, and Speech.

## Programs for Junior High School Teachers

Students who are interested in advanced preparation for teaching in junior high school may choose either the departmentalized program,

defined under I, or the core program, defined under II, depending on preparation and interest. These programs are open to students whose undergraduate work prepared them for either junior high school teaching (including elementary with junior high school endorsement) or secondary school teaching.

I. Departmentalized Program (for those students who are interested in the typical departmentalized junior high school program).

A. Courses in junior high school teaching

1. Prescribed: Master's Project, 3 credits
2. Electives: A minimum total of 24 credits must be earned in at least 2 teaching areas.

B. Professional Education

1. Prescribed:

- a. Ed. 590: Junior High School Education Seminar, 3 credits
- b. A minimum total of 6 credits must be earned in 2 of the following courses:  
Ed. 559: Problems in American Education, 3 credits  
Ed. 567: Human Relations, 3 credits  
Ed. 581: Education of the Gifted, 3 credits  
Psy. 563: Theories of Learning, 3 credits  
Psy. 564: Principles and Practices in the Guidance Program, 3 credits

2. Electives: Other professional education courses may be elected, depending on interest and need.

C. General Studies

1. Prescribed: Eng. 515: Introduction to Research, 2 credits
2. Electives: (Minimum: 7 credits)  
Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Sociology, and Speech, with the further provision that the General Studies electives must be taken in subject areas other than those included in the teaching areas chosen under I-A (2).

II. Block or Core Program (for those students who are interested in junior high school programs organized on the core or block basis)

A. Courses in junior high school teaching

1. Prescribed:

- a. Master's Project, 3 credits
- b. Teaching 520: Teaching in the Junior High School, 6 credits

2. Electives: A minimum total of 21 credits must be earned in at least 3 teaching areas.

## B. Professional Education

### 1. Prescribed:

- a. Ed. 590: Junior High School Education Seminar, 3 credits

- b. A minimum total of 6 credits must be earned in 2 of the following courses:

Ed. 559: Problems in American Education, 3 credits

Ed. 567: Human Relations, 3 credits

Ed. 581: Education of the Gifted, 3 credits

Psy. 563: Theories of Learning, 3 credits

Psy. 564: Principles and Practices in the Guidance Program, 3 credits

2. Electives: Other professional education courses may be elected, depending on interest and need.

## C. General Studies

1. Prescribed: Eng. 515: Introduction to Research, 2 credits

2. Electives: (Minimum: 7 credits)

Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Sociology, and Speech; when advisable to strengthen the preparation in the teaching areas, these electives may be taken in the areas chosen under II-A (2).

## Programs for Secondary School Teachers

In all areas except those in Industrial Arts and Science, a graduate student must have completed at least an undergraduate minor in a subject area in order to be eligible to choose it as his Major at the secondary school level. The prescribed undergraduate preparation for graduate students who desire to choose one of the Science areas is shown in the following outline under I-K, I-L, and I-M.

The student must take a minimum of 6 quarter hours of graduate work in his Major at this college even though he has successfully transferred enough graduate credits to meet the minimum Major requirements as they are outlined in this section.

1. Graduate-level programs have been developed in the following secondary school Majors:

### A. Business Education

1. Prescribed: Master's Project, 3 credits

2. Electives: A minimum of 18 credits must be earned in Business.

### B. English

1. Prescribed: Master's Project, 3 credits

2. Electives: A minimum of 18 credits must be earned in English.

C. Fine Arts

1. Prescribed: Master's Project, 3 credits
2. Electives: A minimum of 18 credits must be earned in Art.

D. Geography

1. Prescribed: Master's Project, 3 credits
2. Electives: A minimum of 18 credits must be earned in Geography.

E. History

1. Prescribed: Master's Project, 3 credits
2. Electives: A minimum of 18 credits must be earned in History.

F. Industrial Arts

1. Prescribed: Master's Project, 3 credits
2. Electives: In addition, a minimum of 18 credits must be earned in Industrial Arts and related fields.

G. Mathematics

1. Prerequisite: undergraduate Mathematics through Integral Calculus.
2. Prescribed:
  - a. Math. 525: College Geometry, 4 credits  
(This requirement is waived if the student has had a college course in Geometry.)
  - b. Master's Project, 3 credits
3. Electives: A minimum of 18 credits must be earned in Mathematics.

H. Music

1. Prescribed: Master's Project, 3 credits
2. Electives: A minimum of 18 credits must be earned in Music.

I. Physical Education

1. Prescribed: Master's Project, 3 credits
2. Electives: A minimum of 18 credits must be earned in Health and Physical Education.

J. Social Science

1. Prescribed: Master's Project, 3 credits
2. Electives: A minimum of 18 credits must be earned in Economics, Geography, Political Science, and Sociology.

K. Speech

1. Prescribed:
  - a. Speech 521: Seminar in Public Address, 3 credits
  - b. Speech 550: Seminar in Speech Education, 3 credits

- c. Master's Project, 3 credits
- 2. Electives: In addition, a minimum of 18 credits must be earned in Speech.

#### L. Biological Science

- 1. Prescribed courses:
  - a. Sci. 510: Science Colloquium, 1 credit per quarter; must be taken for 2 quarters
  - b. One of the following courses:
    - Sci. Ed. 552: Workshop for Science Teachers, 4 crs.
    - Sci. Ed. 553: Problems in Teaching Junior and Senior High School Science, 4 credits
  - c. Master's Project, 3 credits
- 2. Electives:
  - a. Eighteen graduate credits in Biological Science
  - b. Additional courses to make a minimum of 54 graduate and undergraduate credits in Biological Science.

#### M. Physical Science

- 1. Prescribed courses:
  - a. Sci. 510: Science Colloquium, 1 credit per quarter; must be taken for 2 quarters
  - b. One of the following courses:
    - Sci. Ed. 552: Workshop for Science Teachers, 4 crs.
    - Sci. Ed. 553: Problems in Teaching Junior and Senior High School Science, 4 credits
  - c. Master's Project, 3 credits
- 2. Electives:
  - a. Eighteen graduate credits in Physical Science
  - b. Additional courses to make a minimum of 54 graduate and undergraduate credits in Physical Science.

#### N. Broad Science

- 1. Prescribed courses:
  - a. Sci. 510: Science Colloquium, 1 credit per quarter; must be taken for 2 quarters
  - b. One of the following courses:
    - Sci. Ed. 552: Workshop for Science Teachers, 4 crs.
    - Sci. Ed. 553: Problems in Teaching Junior and Senior High School Science, 4 credits
  - c. Master's Project, 3 credits
- 2. Electives:
  - a. Eighteen graduate credits in Science
  - b. Additional courses to make a minimum of 69 graduate and undergraduate credits in Science.

## II. Professional Education

Candidates for the Master's degree in one of the secondary school Majors must have completed a minimum of 36 quarter



hours (undergraduate and graduate) in professional education courses.

**A. Professional Core**

The minimum requirement is 9 credits earned in 3 of the following courses:

Ed. 559: Problems in American Education, 3 credits

Ed. 561: Secondary School Curriculum, 3 credits

Ed. 567: Human Relations, 3 credits

Ed. 569: Philosophy of Education, 3 credits

Psy. 563: Theories of Learning, 3 credits

Psy. 578: Statistical Methods in Education and Psychology, 3 credits

**B. Electives:** Other professional education courses may be elected; the minimum number of elective credits needed will depend on what the student needs to meet the minimum of 36 undergraduate and graduate credits in Professional Education.

**III. General Studies**

**A. Prescribed course:**

Eng. 515 Introduction to Research, 2 credits

**B. Electives: (Minimum: 7 credits)**

Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Sociology, and Speech, with the further provision that the General Studies courses must be taken in subject areas other than that of the student's Major.

**Program for Speech and Hearing Therapists**

A student must have completed an undergraduate major in speech correction before he is eligible to choose Speech and Hearing Therapy as his Major.

**I. Twenty-one quarter hours must be earned in speech and hearing therapy, as follows:**

Speech 501: Advanced Clinical Practice in Speech Therapy and Audiology, 3 credits

Speech 502: Psychogenic Disorders of Speech, 3 credits

Speech 503: Elements of Research in Speech Pathology, 2 crs.

Speech 504: Advanced Audiology, 3 credits

Speech 505: Organic Disorders of Speech, 3 credits

Speech 506: Speech Disorders and Damage to the Central Nervous System, 2 credits

Speech 507: Experimental Phonetics, 2 credits

Master's Project, 3 credits

**II. Professional Education**

**A. Professional Core:** The minimum requirement is 9 credits

earned in 3 of the following courses:

1. Ed. 559: Problems in American Education, 3 credits
2. Ed. 560: Elementary School Curriculum, 3 credits  
or  
Ed. 561: Secondary School Curriculum, 3 credits
3. Ed. 567: Human Relations, 3 credits
4. Ed. 569: Philosophy of Education, 3 credits
5. Psy. 563: Theories of Learning, 3 credits
6. Psy. 578: Statistical Methods in Education and Psychology, 3 credits

B. Electives

III. General Studies

A. Prescribed: Eng. 515: Introduction to Research, 2 credits

B. Electives: (Minimum: 7 credits)

Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Sociology, and Speech.

## Program for Elementary School Principals

Before a student will be permitted to enroll in the program for Elementary School Principals, he must be eligible for a Minnesota elementary school teacher's certificate.

The student must have at least one year of experience at the elementary school level before he will be admitted as a candidate for the Master's degree in the elementary school principalship program.

The following program has been approved by the Minnesota State Department of Education and the Minnesota State Board of Education for meeting the professional preparation requirements of the Elementary School Principal's certificate:

- I. Twenty-four quarter hours must be earned in the areas of elementary school administration, supervision, and curriculum. The distribution of the minimum amount of course work within each of these 3 areas shall be as follows:

A. Elementary School Administration (Minimum: 6 credits)

1. Prescribed course:

Ed. 592: Elementary School Administration, 3 credits

2. Electives: A minimum of 3 credits must be earned in one of the following courses:

Ed. 519: Administration and Supervision of the Reading Program, 3 credits

Ed. 550: School Law, 3 credits

Ed. 574: Educational Administration, 3 credits

Ed. 595: Workshop in Elementary Education, 3-6 crs.

Ed. 598: Seminar in Elementary School Administration, 3 credits

Tchg. 500: Elective Teaching, 2-4 credits

B. Elementary School Supervision (Minimum: 6 credits)

1. Prescribed course:

Ed. 596: Elementary School Supervision, 3 credits

2. Electives: A minimum of 3 credits must be earned in one of the following courses:

Ed. 519: Administration and Supervision of the Reading Program, 3 credits

Ed. 567: Human Relations, 3 credits

Ed. 570: Workshop in Audio-Visual Materials and Methods of Instruction, 4 credits

Ed. 578: Supervision of Student Teaching, 3 credits

Ed. 595: Workshop in Elementary Education, 3-6 crs.

Music 560: Music Consultant in Elementary School, 2 credits

Tchg. 500: Elective Teaching, 2-4 credits

C. Elementary School Curriculum (Minimum: 6 credits)

1. Prescribed course:

Ed. 560: Elementary School Curriculum, 3 credits

2. Electives: A minimum of 3 credits must be earned in one of the following courses:

Ed. 521: The Analysis and Correction of Reading Disabilities, 3 credits

Ed. 523: Practice in the Analysis of Reading Disabilities, 3 credits

Ed. 525: Practice in the Correction of Reading Disabilities, 3 credits

Ed. 595: Workshop in Elementary Education, 3-6 crs.

Art 553: Workshop in Elementary School Art, 4 credits

H. Ed. 530: Seminar in School Health Education, 4 crs.

Math. 560: Problems in Teaching of Mathematics, 3 crs.

Mus. 550: Music for the Classroom Teacher, 4 credits

Mus. 560: Music Consultant in Elementary School, 2 crs.

P. E. 511: Organization and Development of Physical Education in the Elementary School, 4 credits

Sci. Ed. 504: Seminar in Elementary Science Problems, 4 credits

Sci. Ed. 551: Teaching Science in Elementary Schools, 3 credits

II. Other Professional Education (Minimum: 9 credits)

A. Prescribed courses: None

B. Electives: A minimum total of 9 credits must be earned in not less than 3 of the following areas:

1. Psychology of Learning

Psy. 563: Theories of Learning, 3 credits

- Psy. 581: Psychology of Elementary School Teaching, 3 credits
- 2. Tests and Measurements
  - Psy. 562: Advanced Tests and Measurements, 3 credits
  - Psy. 578: Statistical Methods in Education and Psychology, 3 credits
  - Psy. 586: Psychometric Technique: Binet, 3 credits
- 3. Philosophy of Education
  - Ed. 559: Problems in American Education, 3 credits
  - Ed. 569: Philosophy of Education, 3 credits
- 4. Guidance
  - Psy. 564: Principles and Practices of the Guidance Program, 3 credits
  - Psy. 571: Mental Hygiene, 3 credits
- 5. High School Curriculum
  - Ed. 561: Secondary School Curriculum, 3 credits
- 6. Education of Exceptional Children
  - Ed. 571: Introduction to Exceptional Children, 3 credits
  - Ed. 581: Education of the Gifted, 3 credits
  - Psy. 572: Psychology of Exceptional Children, 3 credits

### III. Master's Project

Each student is required to complete a Master's Project, for which 3 credits will be granted. This project must be undertaken under the direction of a Project Committee of which the student's adviser is a member. When appropriate, the 3 credits earned through the satisfactory completion of the Master's Project may be used to meet one of the elective requirements given under items I and II of this program.

### IV. Professional Core

The student will satisfy the Professional Core requirement by taking Ed. 560: Elementary School Curriculum (required under I-C-1) and by choosing 2 of the following courses:

- Ed. 559: Problems in American Education (elective under II-B-3)
- Ed. 569: Philosophy of Education (elective under II-B-3)
- Ed. 567: Human Relations (elective under I-B-2)
- Psy. 563: Theories of Learning (elective under II-B-1)
- Psy. 578: Statistical Methods in Education and Psychology (elective under II-B-2)

### V. General Studies

- A. Prescribed course:
  - Eng. 515: Introduction to Research, 2 credits
- B. Electives: (Minimum: 7 credits)
  - Electives must be chosen from at least 2 of the following

fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Sociology, and Speech.

## **Program for Teachers of the Mentally Retarded**

Before a student will be permitted to enroll in the program, he must be eligible for a Minnesota Teacher's Certificate. He must have at least one year of successful teaching experience before he will be admitted as a candidate for the Master's Degree in this program.

The student should have an undergraduate course in the field of Exceptional Children; otherwise, he must take such a course at either the undergraduate or the graduate level before he undertakes this program.

### **I. Prescribed courses in Special Education**

- Psy. 572: Psychology of Exceptional Children, 3 credits
- Psy. 573: Psychology of Mental Retardation, 3 credits
- Psy. 566: Guidance for the Handicapped, 3 credits
- Ed. 583: Education of the Mentally Retarded, 3 credits
- Ed. 584: Problems in Special Education, 3 credits
- Speech 505: Organic Disorders in Speech, 3 credits

### **II. Other Professional Courses**

#### **A. Prescribed:**

Psy. 578: Statistical Methods in Education and Psychology,  
3 credits

One of the following courses:

- Psy. 586: Psychometric Technique Binet, 3 credits
- Psy. 587: Psychometric Technique Wechsler, 3 credits

#### **B. The student will meet Professional Core requirements by taking three of the following courses:**

Ed. 559: Problems in American Education, 3 credits

Ed. 560: Elementary School Curriculum, 3 credits  
or

Ed. 561: Secondary School Curriculum, 3 credits

Ed. 567: Human Relations, 3 credits

Ed. 569: Philosophy of Education, 3 credits

Psy. 563: Theories of Learning, 3 credits

Psy. 578: Statistical Methods in Education and Psychology,  
3 credits

### **III. Master's Project, 3 credits**

### **IV. General Studies**

#### **A. Prescribed:**

Eng. 515: Introduction to Research, 2 credits

**B. Electives: (Minimum: 7 credits)**

Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Sociology, and Speech.

**Program for Reading Specialists**

The graduate student specializing in the field of reading may choose to prepare himself as a general reading consultant, an elementary school remedial reading teacher, or a secondary school remedial reading teacher.

A student preparing to be a general reading consultant or an elementary school remedial reading teacher (1) must be eligible for a Minnesota elementary school teacher's certificate and (2) must have two years of successful teaching experience.

A student preparing to be a secondary school remedial reading teacher (1) must be eligible for a Minnesota secondary school teacher's certificate in the Language Arts area and (2) must have two years of successful teaching experience.

**I. Eighteen quarter hours must be earned in the field of Reading or related areas.**

**A. Fifteen quarter hours must be earned in the following courses:**

Ed. 519: Administration and Supervision of the Reading Program, 3 credits

Ed. 521: Analysis and Correction of Reading Disabilities, 3 credits

Ed. 523: Practice in the Analysis of Reading Disabilities, 3 credits

Ed. 525: Practice in the Correction of Reading Disabilities, 3 credits

Psy. 586: Psychometric Technique—Binet, 3 credits  
or

Psy. 587: Psychometric Technique—Wechsler, 3 credits  
Students may take substitute courses with the approval of the adviser when the prescribed courses have been taken at the undergraduate level.

**B. The student must elect one of the following courses:**

Ed. 517: Developmental Reading in the Junior and Senior High Schools, 3 credits

Eng. 552: Language Arts Problems, 4 credits

Psy. 562: Advanced Tests and Measurements, 3 credits

Psy. 564: Principles and Practices of the Guidance Program, 3 credits

Psy. 572: Psychology of Exceptional Children, 3 credits

**II. Master's Project, 3 credits**



### III. Other Professional Education

#### A. Professional Core

The minimum requirement is 9 credits earned in 3 of the following courses:

1. Ed. 559: Problems in American Education, 3 credits
2. Ed. 560: Elementary School Curriculum, 3 credits

or

- Ed. 561: Secondary School Curriculum, 3 credits
3. Ed. 567: Human Relations, 3 credits
4. Ed. 569: Philosophy of Education, 3 credits
5. Psy. 563: Theories of Learning, 3 credits
6. Psy. 578: Statistical Methods in Education and Psychology, 3 credits

#### B. Electives

### IV. General Studies

#### A. Prescribed:

Eng. 515: Introduction to Research, 2 credits

#### B. Electives: (Minimum: 7 credits)

Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Social Studies, Sociology, and Speech.

## Program for School Counselors

Before a student will be permitted to enroll in the program for School Counselors, he must be eligible for a Minnesota Teacher's Certificate.

The student must have at least one year of successful teaching experience before he will be granted endorsement for counselor certification.

The following program meets the requirements of the Minnesota State Department of Education and the Minnesota State Board of Education:

#### I. Prescribed courses in School Counseling:

Psy. 564: Principles and Practices of the Guidance Program, 3 credits

Psy. 578: Statistical Methods in Education and Psychology, 3 credits

Psy. 585: Theory of Personality Structure, 3 credits

or

Psy. 571: Mental Hygiene, 3 credits

Psy. 590: Appraisal Techniques, 3 credits

Psy. 592: Occupational and Educational Information, 3 credits

- Psy. 593: Counseling Procedures, 3 credits
- Psy. 594: Supervised Practicum in Counseling, 3 credits

II. Elect one of the following courses:

- Psy. 587: Psychometric Technique Wechsler, 3 credits
- Psy. 591: Group Guidance Procedures, 3 credits
- Psy. 595: Organization and Administration of the Guidance Program, 3 credits

III. Master's Project, 3 credits

IV. The student will meet the Professional Core requirement by taking three of the following courses:

- Psy. 563: Theories of Learning, 3 credits
- Ed. 560: Elementary School Curriculum, 3 credits
- or
- Ed. 561: Secondary School Curriculum, 3 credits
- Ed. 559: Problems in American Education, 3 credits
- or
- Ed. 569: Philosophy of Education, 3 credits

V. General Studies

- A. Prescribed course:
  - Eng. 515: Introduction to Research, 2 credits
- B. Electives: (Minimum: 7 credits)
  - Electives must be chosen from at least 2 of the following fields: Art, Business, Economics, English, Geography, History, Mathematics, Music, Political Science, Science, Social Studies, Sociology, and Speech.

**Procedure for admission to the graduate program for school counselors:**

A graduate student at St. Cloud State College is not automatically accepted into the Master's degree program for guidance and counseling merely by registering for and completing one or more courses in the program. Until such time as he is formally notified of acceptance in the program by his adviser or through the Graduate Studies office, he is classified as an Adult Special. No more than nine credits taken as an Adult Special may be applied toward the degree. Consequently, it is important that the student attend to the following details as soon as possible so that his status can be determined early in the program:

- a. Complete the "Application for Admission to Graduate Study" and send it to the Graduate Studies office.
- b. Contact the Coordinator of Counselor Education.
- c. Contact the Psychology Division Chairman for assignment to an adviser.

- d. Immediately contact the adviser to whom assigned.
- e. Arrange to have two official copies of undergraduate transcripts sent to Graduate Studies office from the college where the work was taken. If graduate credits are to be transferred to this college, two official transcripts are similarly required. One of these copies is filed with the adviser.
- f. Have the following recommendations sent to the adviser:
  - 1.) One from former or present employer (principal or superintendent).
  - 2.) One from personal friend or business acquaintance.
  - 3.) One from a faculty member at St. Cloud State College or another college.
- g. Submit to adviser a brief autobiography to include reasons for deciding to enter the counseling profession.
- h. Register at the Psychological Services Center to take the graduate test battery and a writing test.

#### **Regulations for students who have a Master's degree:**

- a. People who have completed a Master's degree at an accredited institution may be granted endorsement for counselor certification upon completion of course and other requirements. These students must declare their intention to work toward certification in counseling. At the time that he makes this statement of intention, the student will file a copy of his proposed program in the Graduate Studies office.
- b. These students will be subject to the same selection and review procedures as are all others in the program.
- c. Since students in this category are not degree candidates, they will not be subject to the nine credit transfer regulation. However, a minimum of 24 credits in the counseling program must be earned at St. Cloud State College.
- d. The student may be required to complete a Master's Project in the guidance and counseling area if the school counselor program's Selection and Review Committee deems it necessary.
- e. In no instance will endorsement for counselor certification be granted to an individual who has not earned (1) a Master's degree and (2) a minimum of 45 accumulated credits (including transfer credits) in the counseling program.

#### **Program for Rehabilitation Counselors**

Before a student will be permitted to enroll in the program for Rehabilitation Counselors, he must have met the undergraduate requirements in the field.

The following program meets the requirements of the Minnesota State Department of Education and the Minnesota State Board of Education.

I. Prescribed courses in Rehabilitation Counseling

- Psy. 566 Guidance for the Handicapped, 3 credits
- Psy. 562 Advanced Tests and Measurements, 3 credits
- or
- Psy. 590 Appraisal Techniques, 3 credits
- Psy. 575 Abnormal Psychology, 3 credits
- Psy. 585 Theory of Personality Structure, 3 credits
- Psy. 592 Occupational and Educational Information, 3 credits
- Psy. 593 Counseling Procedures, 3 credits
- Psy. 596 Supervised Practicum in Rehabilitation Counseling, 3 credits

II. Elect one of the following courses:

- Psy. 586 Psychometric Technique Binet, 3 credits
- Psy. 587 Psychometric Technique Wechsler, 3 credits

III. Master's Project, 3 credits

IV. Prescribed courses in Professional Core:

- Psy. 563 Theories of Learning, 3 credits
- Psy. 564 Principles and Practices of the Guidance Program, 3 credits
- Psy. 578 Statistical Methods in Education and Psychology, 3 credits

V. General Studies

A. Prescribed course:

- Eng. 515 Introduction to Research, 2 credits

- B. Electives: A minimum of 7 credits must be earned in at least two of the following fields: Art, Business, Economics, English, Geography, History, Industrial Arts, Mathematics, Music, Political Science, Science, Sociology, and Speech.

# DESCRIPTION OF COURSES

## Division of Arts and Music

Mrs. Adams, Mr. Barrett, Mr. Jelden, Mr. Laudon,  
Miss Marvel, Mr. Rawland, Mr. Waugh, Mr. Larson, Chairman

### FINE ARTS

#### Courses for Advanced Undergraduate and Graduate Students

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Art. 1-4 credits
- 530 **History of Art.** A survey of the great art of western man from the Paleolithic Era (20,000 B.C.) through 1300 A.D. Aesthetic qualities of the architecture, painting, and sculpture of this period. Lectures, discussions, field trips. 4 credits
- 531 **History of Art.** A continuation of Art 430-530 beginning with the Renaissance (1400 A.D.) through 1800 A.D. 4 credits
- 532 **History of Art.** A continuation of Art 431-531 beginning with 1800 A.D. and progressing to the present. 4 credits
- 538 **Great Masters of Painting.** Several artists of different periods and countries; growth of each from early drawings to their mature style. 4 credits
- 539 **Art in the U.S.** Painting, sculpture, architecture, and design in general from Colonial times to present. Special emphasis on local, Minnesota, and Mid-West Art and their particular problems. 4 credits
- 553 **Workshop in Elementary School Art.** Problems of teaching art and experimentation in various media and techniques. Adapted to individual needs of elementary school teachers. Prerequisite: Teaching experience. 4 credits

#### Courses for Graduate Students Only

- 544 **Advanced Studio Work.** Special problems in any of the following: oil painting, water color painting, sculpture, design, or commercial art. Prerequisite: Art 232 and Art 234 or equivalent. 4 credits
- 564 **Design Laboratory.** Creative experimentation in many materials and critical analysis of result. Prerequisite: Art 232 and Art 234 or equivalent. 4 credits

### INDUSTRIAL ARTS

#### Courses for Advanced Undergraduate and Graduate Students

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Industry. 1-4 credits.

- 517 **Organization and Administration of Industrial Education.** Organization and administration of all-day, part-time, and evening industrial programs. 3 credits.
- 520 **Electronics and Practical Radio.** Electron emission, tube characteristics, receivers, transmitters, power supplies, amplifiers, rectifiers, oscillators and radio servicing. Prerequisite: Industrial Arts 341. 4 credits.
- 531 **Evaluation in Industrial Subjects.** Analysis of factors to be evaluated; instruments of measurement to be studied; techniques of their use. 2 credits.
- 551 **Selection and Organization of Subject Matter.** Technique of trade and job analysis; selection of teaching content; organization of content into instruction sheets and course material. 3 credits.

### **Courses for Graduate Students Only**

- 505 **Handicrafts Seminar.** Approached both as a shop subject and a recreational activity; activities based upon student demonstration and reports; experimentation with new media. 2 credits
- 515 **Seminar in Industrial Education.** Group exploration of topics bearing on Industrial Education. (Example—Evaluation of psychologists of learning as they relate to Industrial Education). 2 credits
- 530 **Improvement of Instruction in Shop Subjects.** Investigation of specific shop problems; improvement of individual skills and knowledges; opportunity for experimentation; setting up new shop areas. 2-6 credits
- 568 **Current Literature and Research.** Analysis of literature of industrial field, with special attention to individual readings and reports; implications of such literature for current problems in Industrial Education. 4 credits
- 573 **Leaders and Movements in Industrial Education.** Contributors to development of industrial education with special attention to economic, social, and philosophical factors motivating this development. 4 credits

## **MUSIC**

### **Course for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Music. 1-4 credits

### **Courses for Graduate Students Only**

- 520 **Analytical Technique.** Harmonic, melodic, and structural analysis of music in various periods with emphasis on aspects specifically needed by students. 4 credits
- 523 **Music in Western Civilization.** Primarily for students who want a general studies elective in music. Examination of music masterpieces; continuation and elaboration of Humanities 123. Not open to students with majors or minors in music. Prerequisite: Humanities 123 or equivalent. 3 credits
- 531 **Choral Arranging.** Principles and devices in choral arranging for choruses of all types and degrees of development. 4 credits
- 542 **Choral Literature.** Choral literature from Palestrina to present day with special attention to greater works in Oratorio, Operatic, Choral, Symphonic, and Mass form. 2 credits



- 550 **Music for the Classroom Teacher.** Advanced methods in teaching Public School Music through first six grades. Unit study, aids in music integration, special projects, current materials, comparison of teaching methods. 4 credits
- 553 **Music Education Seminar.** Research and discussion of latest developments. Individual problems analyzed and discussed. 2 credits
- 554 **Stringed Instrument Seminar.** Special projects; special techniques of bowing, position work, and artistic skills; survey of solo materials. 2 credits
- 555 **Band Administration.** Administrative principles applied to school bands, with special emphasis on organization, promotion, and public relations. 2 credits
- 556 **Band Rehearsal Techniques.** Practice in aural discrimination of performance errors and application of corrective procedures. Special emphasis given to intonation, balance, blend, quality, interpretation, and ensemble. 2 credits
- 560 **The Music Consultant in the Elementary School.** Staff relations; individual and group conferences; workshop, co-teaching, demonstration and observation teaching; utilization of music to enrich elementary school program. 2 credits
- 561 **The Teaching and supervision of Music in Junior and Senior High Schools.** Place of music in education of adolescents; materials and activities. Prerequisite: Music 348 and 349. 3 credits

## Division of Business

Mr. Ball, Mr. Nash, Mr. Daggett, Chairman

### Courses for Advanced Undergraduate and Graduate Students

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Business. 1-4 credits
- 507 **Government Regulation of Business.** Public policy with respect to regulation and control of business; present laws regulating business; current problems relating to regulation of business. 3 credits
- 510 **Personnel Administration.** Principles, basic procedures in employment, job and worker classification, morale, safety, training, labor relations, and managerial statistics; overview of selection techniques, interviewing, employee counseling; job analysis and evaluation. 4 credits
- 512 **Industrial Management.** History, plant location, buildings, equipment, production, planning, working conditions, product research, procurement, cost control. 4 credits
- 513 **Office Management.** Problems in planning and directing functions of business or professional offices; executive duties and responsibilities of office manager and private secretary; supervision of employees. 4 credits
- 514 **Office Automation.** Electronic data processing, technology, techniques, economy, personnel problems relating to computers and data-processing machines. 2 credits

- 516 **Credit and Collections.** Work of credit manager, kinds of credit, credit agencies, processing credit applications, and collection procedures. 2 credits
- 519 **Principles of Marketing.** Marketing functions; market institutions; merchandising; pricing policies. Prerequisite: Economics 272. 4 credits
- 520 **Retail Store Management.** Location, layout, organization, buying, receiving and marking; stock control; merchandise budget; inventory methods; credit and collection; delivery; personnel problems. 4 credits
- 521 **Elements of Retail Merchandising.** Further study of markup, computation of profit, inventory valuation, stock control, merchandise planning, expense control, and merchandising policies. Prerequisite: College Algebra. 4 credits
- 522 **Principles of Advertising.** Functions, theory, and principles; purposes of advertising; methods of appeal; elementary problems of copy, layout, typography, selection of media. 3 credits
- 523 **Salesmanship.** Salesman, merchandise, customers, and sale; practical illustrations and demonstrations. 3 credits
- 524 **Sales Management.** Investigations of markets; planning sales effort; management of sales personnel; control of sales operations. Prerequisite: Business 423-523. 2 credits
- 525 **Market Research.** Techniques; solution of marketing problems; specialized research activities; product development; advertising research; sales analysis. Prerequisite: Business 419-519 and Mathematics 330. 3 credits
- 527 **Real Estate Fundamentals.** Real estate business: property rights, legal processes and instruments, appraisal, zoning, housing, land development, sale, financing, and management. 4 credits
- 531 **Problems in Retailing.** Case-method study of problems in retail profit, merchandising policies, buying, pricing, merchandise control, personnel, sales promotion, store system and operation, and finance. 4 credits
- 537 **Business Law.** Continuation of study of law; emphasis on personal property and real property, deeds, mortgages, landlords and tenants, bankruptcy, wills, and agency. 4 credits
- 540 **Business Finance.** Problems of starting a business, selection of form of business, financial operations of modern business, and relations with investment world. 4 credits
- 544 **Principles of Insurance.** Property, liability, and life insurance; economic and social significance of various types of life insurance contracts; structure, management, and investments of life insurance companies. 4 credits
- 546 **Consumer Education.** General education course open to all graduate students; perplexing problems of personal banking, wise consumption, buying on credit, borrowing money, making investments, buying insurance, home ownership, and household records. 4 credits
- 550 **Business for General Education.** Consumer law; new kinds of household insurance; annuities, pensions, and Social Security; tax accounting; estate planning and wills. Not open to business majors. 4 credits
- 568 **Personal Income Tax.** Training in preparation of personal income tax returns, both State and Federal. Not open to accounting majors. 3 credits
- 570 **Income Tax Accounting A.** Designed to give information necessary to ascertain and report correctly taxable income and compute tax for individuals; analysis of federal and state income tax laws regarding such topics as gross income exclusions, deductions, and exemptions. 4 credits

- 571 Cost Accounting A.** Principles; cost analysis. 4 credits
- 572 Auditing.** Designed to give advanced accounting students training in theoretical and practical aspects of examining accounting records. Prerequisite: 24 credits in accounting subjects or consent of instructor. 4 credits
- 573 Income Tax Accounting B.** Continuation of Business 470 including reports necessary for partnerships, corporations, Social Security taxes, and federal estate and gift taxes. 4 credits
- 574 Cost Accounting B.** Continued cost accounting and cost analysis, emphasizing variations in accounting for overhead, special applications of cost accounting, differential cost analysis, standard and estimated costs. 4 credits
- 575 Advanced Accounting.** Further study of current assets, noncurrent assets, liabilities, capital stock, surplus. 4 credits
- 576 Advanced Accounting.** Continuation of Business 475-575; preparation of statements from incomplete data, correction of errors, statement analysis, statement of application of funds, partnerships, joint ventures, installment sales, consignment sales, agency and branch accounting. 4 credits
- 577 Advanced Accounting.** Continuation of Business 476-576; corporate combination, consolidated financial statements, statement of affairs, receivership accounts and statements, accounting for estates and trusts, accounting for governmental units, and actuarial science applied to accounting. 4 credits
- 578 Governmental Accounting.** Accounting for governmental bodies such as federal, state, county, city, and public institutions. Includes funds, budgetary accounts, encumbrances, accrual methods, and treasurer's accounts. 4 credits

### **Courses for Graduate Students Only**

- 580 Foundations in Business Education.** Basic Principles, philosophy, and curriculum development in business education. 3 credits
- 586 Improvement of Instruction in Secretarial Subjects.** Instruction materials, methods, and procedures; standards of achievement. 3 credits
- 587 Improvement of Instruction in Bookkeeping and Basic Business Subjects.** Aims, courses of study, materials, teaching techniques, testing programs, and other classroom problems. 3 credits
- 590 Administration and Supervision of Business Education.** Problems of teacher, department head, or supervisor beyond those involved in classroom teaching; equipment and layout, budget making, publicity, curriculums, selection of textbooks, employment, rating, and related problems. 3 credits

## **Division of Education**

Mr. Grunerud, Mr. Menninga, Mr. Mork,  
Mr. Perry, Mr. Pollock, Mr. Zaeske  
Mrs. Applegate, Chairman

### **EDUCATION**

#### **Courses for Advanced Undergraduate and Graduate Students**

- 500 Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Education. 1-4 credits

- 517 **Developmental Reading in the Junior and Senior High School.** Nature of high school reading program; development of reading techniques and skills; development of vocabulary, reading interests, and reading ability in content fields; appraisal of reading abilities; diagnosis and remediation. 3 credits
- 519 **Administration and Supervision of the Reading Program.** Emphasis on implementation and improvement of the reading program from pre-reading through corrective procedures in high school. 3 credits
- 521 **Analysis and Correction of Reading Disabilities.** Causes of reading difficulties, procedures to diagnose and correct them. Relationship to disabilities of vision, hearing, speech, intelligence, preference, health, readiness, home environment, school environment. Prerequisite: One year teaching experience and a course in developmental reading. 3 credits
- 523 **Practice in Analysis of Reading Disabilities.** Clinical experiences in administration and interpretation of techniques in diagnosing reading disabilities. Opportunity to determine causes of disabilities found in cases sent to Psychological Services Center and to prescribe needed remediation. Prerequisite: Ed. 421-521 and Division approval. 3 credits
- 525 **Practice in Correction of Reading Disabilities.** Clinical experiences in correction of reading disabilities of cases diagnosed by Psychological Services Center. Prerequisite: Ed. 423-523 and Division approval. 3 credits
- 550 **School Law.** Statutes and judicial decisions affecting public education in Minnesota and other states; legal authority, powers, and liabilities of school personnel with respect to school finance, curriculum, property, contracts, pensions, tenure, etc. 3 credits
- 571 **Introduction to Exceptional Children.** Recognition, needs, and guidance of children who deviate significantly from the average in physical, mental, emotional, or social characteristics; implications for education of all children. 3 credits
- 574 **Educational Administration.** Administration of education in the United States; problems relating to participation of Federal government in education; organization and duties of state departments of education; major activities of boards and superintendents in local school units. 3 credits
- 575 **Improvement of Secondary School Instruction.** Learning principles at adolescent level; secondary school curriculum; planning for classroom instruction; managing a classroom; conducting individual and group work; using instructional materials; study and work habits. 3 credits
- 578 **Supervision of Student Teaching.** Procedures for guiding students in planning, teaching, evaluating, learning activities. Prerequisite: Two years successful teaching experience. Enrollment restricted to present and past cooperating teachers and those in a position to supervise student teachers. 3 credits
- 581 **Education of the Gifted.** Identification and characteristics; psychological factors; educational provisions and procedures with focus on improvement of instruction; recent studies and surveys. Limited to experienced elementary and secondary school teachers. Prerequisite: a course in Exceptional Children. 3 credits
- 582 **The Education of the Orthopedically Handicapped.** Analysis of special problems of orthopedically handicapped and cerebral palsied; effective use of professional and physical resources; planning the school day; adaptation and adjustment of curriculum methods and materials to meet individual and group needs; interpretation and use of professional records. Prerequisite: Ed. 471-571. 3 credits

- 583 Education of the Mentally Retarded.** Screening and selection of students; basic organization of school programs; curriculum development and special procedures; problems related to integration of mentally retarded students into general school programs; evaluation of growth and development; relationships with parents, school, and community. Observation in classes for mentally retarded. Prerequisite: Ed. 471-571. 3 credits
- 595 Workshop in Elementary Education.** Specific teaching problems of experienced teachers; intensive study under direction of workshop staff who give personal guidance, suggest methods, references, and resources. Prerequisite: Teaching experience and permission of workshop staff. 3-6 credits
- 597 Aviation Education Workshop.** Aviation in planning teaching units and in developing background for teaching about the Air Age; teaching aids; lectures; demonstrations; field and laboratory work. 3 credits

### **Courses for Graduate Students Only**

- 559 Problems in American Education.** Emphasis on the most general of the issues arising in our American educational situation; organizing principle of education in a democracy; the school and the state; education and social reconstruction; public schools and religious education; academic freedom; teaching controversial issues. Prerequisite: Eng. 515, or taken concurrently. 3 credits
- 560 Elementary School Curriculum.** Historical development; current issues and trends; sociological and psychological foundations; organization; programs and procedures of curriculum improvement stressing roles of teacher and administrator. Prerequisite: Eng. 515, or taken concurrently. 3 credits
- 561 Secondary School Curriculum.** Historical development; current issues and trends; sociological and psychological foundations; theories of secondary school education; organization; programs and procedures of curriculum improvement stressing role of teacher. Prerequisite: Eng. 515, or taken concurrently. 3 credits
- 567 Human Relations.** Techniques and practice of group interaction in problematic human relations situations; case analysis; group discussion; sociodrama and role-playing; action research; community and school projects. Prerequisite: Eng. 515, or taken concurrently. 3 credits
- 569 Philosophy of Education.** Historical aspects of education theory; beliefs, arguments, and assumptions underlying current educational thought and practice. Prerequisite: Eng. 515, or taken concurrently. 3 credits
- 570 Workshop in Audio-Visual Materials and Methods of Instruction.** Opportunity for experienced teachers and administrators to study questions and problems about instructional materials and methods that are of mutual interest. Activities to be based on needs of workshop members. 4 credits
- 584 Problems in Special Education.** 3 credits
- 590 Junior High School Education Seminar.** History, philosophy, and development of junior high school; organization and management; curriculum organization; guidance; extra-curricular activities. 3 credits
- 592 Elementary School Administration.** Responsibilities of elementary school principal; relationships between teacher, principal, superintendent, and board of education; elementary school program; special learning aids; pupil accounting; use and care of school facilities; non-teaching staff. 3 credits
- 596 Elementary School Supervision.** Organization, purposes, and procedures for supervision; study of teaching-learning situations with emphasis upon principal's function in diagnosis and improvement of instruction. 3 credits



- 598 **Seminar in Elementary School Administration.** Problems facing principals in organization and administration of elementary schools. Areas of emphasis determined by needs of members of seminar. Open only to experienced elementary school teachers and principals. 3 credits

## **TEACHING**

### **Courses for Graduate Students Only**

- 500 **Elective Teaching.** Supervised laboratory experiences in any of following areas: teaching, guidance, school administration, supervision of instruction. Prerequisite: Two years successful teaching experience. 2-4 credits
- 520 **Teaching in the Junior High School.** Internship opportunities for observation, participation, and teaching in a junior high school core program; parallel classwork related to nature, conditions, and problems of core teaching. 6 credits

## **Division of Health and Physical Education**

Miss Bleick, Mr. Kasper, Mr. Serdula, Mr. Brainard, Chairman

## **PHYSICAL EDUCATION**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Physical Education. 1-4 credits
- 511 **Organization and Development of Physical Education in the Elementary School.** Principles, problems, and procedures. Open to 4-year elementary graduates. 4 credits
- 515 **Organization and Administration of Intramural Sports.** Methods and materials of intramural sports program in public schools. Content of program, methods of organizing competition, regulations governing play, outcomes and awards. 3 credits
- 548 **Theory and Technique of Physical Medicine.** Causes, treatment, and educational implication of crippling conditions of pre-school and school age children; rehabilitation and life adjustment of individuals with single and multiple physical handicaps; facilities and agencies organized to help the physically handicapped. Prerequisite: Phy. Ed. 348. 4 credits
- 550 **Curriculum in Physical Education.** Planning units of work; psychological, sociological, and physiological factors involved. Open only to majors and minors except by consent of instructor. 4 credits
- 556 **The Administration of Interscholastic Athletics.** History and objectives of high school athletics; local organization; state and national control over high school athletics; safety and sanitation in athletics. 3 credits
- 595 **Workshops in Health Education, Physical Education, and Recreation.** Credits arranged.



## **Courses for Graduate Students Only**

- 505 **History, Principles and Philosophy of Physical Education.** History, principles, and philosophy of organized physical education from its early beginning to present. Effects of foreign countries' work in the field; impact program in United States. 3 credits
- 510 **Supervision of Instruction in Health and Physical Education.** Planning; teacher qualifications; conducting conferences with health and physical education teachers. 3 credits
- 535 **Theory of Dance.** History, principles, theory, and philosophy underlying dance from primitive times to the present. 3 credits
- 540 **Camping Administration.** Organization and administration of camps; program planning; selection and training of staff; composite selection and development; health and safety. 3 credits
- 552 **Tests and Measurements in Physical Education.** Critical study of tests and measurements available in physical education; methods of constructing and evaluating new tests and measurements. 3 credits
- 554 **Advanced Theory of Competitive Athletics.** Practical problems associated with coaching and training a competitive athlete through high school and college years. No one sport will be stressed. Physical, intellectual, and psychological phases of athlete's life contingent on high performance. 3 credits
- 560 **Administration of Physical Education.** Facilities, equipment, space, time, costs, etc. involved in promotion of a physical education program. 3 credits

## **HEALTH EDUCATION**

### **Courses for Graduate Students Only**

- 530 **Seminar in School Health Education.** Problems confronting teachers engaged in teaching or supervising health education in public schools. 4 credits
- 532 **Survey of Recent Research in the Field of Health.** Readings and discussions of recent studies and authentic reports in various areas of health interest. 2 credits

## **Division of Languages and Literature**

Miss Banta, Mr. Cairns, Mr. Coard, Mr. Dedmon, Mr. House,  
Mr. Housman, Mr. McDermott, Mr. Mertens, Mr. Michael,  
Mr. Smith, Mr. Thompson, Mr. Wick, Mrs. Worthington,  
Mr. Barnhart, Chairman

## **ENGLISH**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in English. 1-4 credits

- 501 **Literary Theory and Criticism.** Concepts which apply to such problems as the writer's creative process, the various purposes of literary art, form and technique, and the responses that literature elicits. A selected reading of the great critical works, old and new, which influence man's relationship with literature. Designed to develop critical competence for literary scholarship and teaching. 3 credits
- 520 **World Literature.** Great works from the Classical Period to the present; emphasis on the Western World. 4 credits
- 530 **Chaucer.** The Canterbury Tales and other narratives in Middle English. 4 credits.
- 534 **Business and Professional Communication Skills.** Content, form, and style of written and oral English; organization and presentation; precise and summary writing; reports; prepared talks; discussion leadership; listening. 4 credits
- 536 **Structural Linguistics.** Advanced studies of sounds, sentence structure, inflections, and vocabulary. Prerequisite: English 431 or 433. 4 credits
- 540 **Milton and Dryden.** Prose, poetry, and drama of the Age of Controversy. 4 credits
- 541 **The Novel.** Critical and historical studies in Nineteenth and Twentieth Century novel, chiefly British and American. 4 credits
- 560 **The American Renaissance.** Transcendentalists and their critics: Emerson, Thoreau, Hawthorne, Melville, Longfellow, and related authors. 3 credits
- 591 **Drama: The Beginnings to Ibsen.** World drama, its origin and genesis. Primitive drama, Classical Greek and Roman, Oriental, Medieval, Elizabethan, Neo-classic, French, Restoration, Eighteenth Century to 1875. 4 credits
- 592 **The Modern Drama: Ibsen to World War II.** Literature and production techniques of the modern theatre. 4 credits
- 593 **Contemporary Drama.** Trends in literature and production techniques of present-day world theatre. 4 credits
- 595 **Speech and English Workshop.** Subject matter to be determined in advance of each offering. 3-8 credits

### **Courses for Graduate Students Only**

- 515 **Introduction to Research.** Evaluating research procedures and interpreting findings; defining and delimiting a problem; efficient gathering and proper documentation of data; organization and presentation of findings in acceptable form. 2 credits
- 535 **Advanced Experimental Writing.** Individual or group projects in traditional and contemporary forms; essay, fiction, lyric, and drama. 4 credits
- 538 **American Studies.** Intensive examination of the works of selected American authors. 2-4 credits
- 543 **Shakespeare Studies.** Text and source; theories; history of representative comedies, tragedies, and histories. 4 credits
- 549 **Contemporary Studies.** Analysis of contemporary literary thought, to provide opportunity to explore thoroughly the works of selected writers. 4 credits
- 552 **Language Arts Problems.** Latest trends in language arts teaching and course organization; application to specific problems of class members, with emphasis on individual research. Prerequisite: English 452 or equivalent. 4 credits

## **FRENCH**

### **Course for Advanced Undergraduate and Graduate Students**

- 595 **Foreign Language Workshop.** Area limited and specific subjects selected before the opening of the summer session. 3-8 credits

## **GERMAN**

### **Course for Advanced Undergraduate and Graduate Students**

- 595 **Foreign Language Workshop.** Area limited and specific subjects selected before the opening of the summer session. 3-8 credits

## **SPANISH**

### **Course for Advanced Undergraduate and Graduate Students**

- 595 **Foreign Language Workshop.** Area limited and specific subjects selected before the opening of the summer session. 3-8 credits

## **SPEECH**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Speech. 1-4 credits
- 520 **Persuasion.** Added emphasis to uses of effective extemporaneous speech; psychological elements in audience-speaker situation; motivation, attention, suggestion; ways and means of winning audience response. 3 credits
- 526 **Argumentation.** Fundamentals of oral argumentation, with practical experience in dealing with contemporary problems, using the medium of debate. Special emphasis given to developing habits of critical thinking. 3 credits
- 528 **Speech Criticism.** Analysis of rhetorical principles applied to public address. Prerequisite: Speech 320, 325. 3 credits
- 542 **Theory and Practice of Stage Lighting.** Development of stage lighting; basic needs; cost and types of equipment. Prerequisite: Speech 236. 2 credits
- 544 **Acting and Directing Workshop.** Laboratory course designed to give experience in meeting problems in acting and directing in educational theatre production. Prerequisite: Speech 235. 4 credits
- 546 **Theory and Practice of Scenic Design I.** Development of scenic design; basic needs and procedures in designing plays. Prerequisite: Speech 235, 236. 2 credits
- 547 **Theory and Practice of Scenic Design II.** Continuation of Speech 446. Prerequisite: 446. 2 credits
- 548 **Theory and Technique of Acting.** Methods of interpreting characters in plays for educational theatre production. Prerequisite: Speech 235. 3 credits

- 549 **Theory and Technique of Directing.** Methods of casting and directing suitable plays for educational theatre production. Prerequisite: Speech 235. 3 credits
- 552 **Teaching of Speech.** Materials and methods of speech in high school. 2 credits
- 591 **Drama: The Beginnings to Ibsen.** World drama, its origin and genesis. Primitive drama. Classical Greek and Roman, Oriental, Medieval, Elizabethan, Neo-classical, French, Restoration, Eighteenth Century to 1875. 4 credits
- 592 **The Modern Drama: Ibsen to World War II.** Literature and production techniques of the modern theatre. 4 credits
- 593 **Contemporary Drama.** Trends in literature and production techniques of present-day world theatre. 4 credits
- 595 **Speech and English Workshop.** Subject matter to be determined in advance of each offering. 3-8 credits
- 596 **Summer Theatre Workshop.** Intensive study in theatre production for advanced students in residence at the professional Theatre L'Homme Dieu, Alexandria, Minnesota. Production of ten plays in eleven weeks. Acting, directing, costuming, construction, publicity, lighting, and other disciplines of the theatre. Registration by application only. 1-8 credits

### **Courses for Graduate Students Only**

- 501 **Advanced Clinical Practice in Speech Therapy and Audiology.** Clinical practice with more uncommon types of speech and hearing disorders. 1 to 3 credits
- 502 **Psychogenic Disorders of Speech.** Stuttering, hysterical aphonia, and other psycho-somatic speech deviations. 3 credits
- 503 **Elements of Research in Speech Pathology.** Tools to evaluate methods and results of original research in Speech Science; experimental design; statistical measures. 2 credits
- 504 **Advanced Audiology.** Techniques in above-threshold audiometric testing; objective audiometry; aid fitting; auditory training. 3 credits
- 505 **Organic Disorders of Speech.** Etiology, diagnosis and treatment of cleft palate and lip, laryngeal cancer, and other organic pathologies. 3 credits
- 506 **Speech Disorders and Damage to the Central Nervous System.** Cause, diagnosis, and treatment of cerebral palsy and aphasia. 2 credits
- 507 **Experimental Phonetics.** Research in Speech Science not strictly devoted to therapeutic work in speech and hearing; field trips to nearby laboratories and manufacturing concerns. 2 credits
- 521 **Seminar in Public Address.** 3 credits
- 522 **Critical Studies in Oratorical Theory.** Major Greek and Roman works in rhetoric. 3 credits
- 539 **Seminar in Acting and Directing.** 3 credits
- 550 **Seminar in Speech Education.** 3 credits
- 560 **Seminar in Technical Problems of Theatre.** 3 credits
- 561 **Seminar in Theatre History.** 3 credits

# Division of Mathematics and Science

Mr. Anderson, Mr. Barker, Mr. Erickson, Mr. Goehring,  
Mr. Hanson, Mr. Hopkins, Mr. Laakso, Mr. Michaelson,  
Mr. Partch, Mr. Vandell, Mr. Youngner, Mr. Nelson, Chairman

## MATHEMATICS

### Courses for Advanced Undergraduate and Graduate Students

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Mathematics. 1-4 credits
- 523 **Theory of Equations:** Algebraic theory, Complex numbers; elementary theorems on roots of equations; constructions with ruler and compass; cubic equations; quartic equations; isolation of real roots; solution of numerical equations. Prerequisite: Mathematics 243 or 331. 4 credits
- 525 **College Geometry.** An extension of plane geometry. Emphasis on analysis in problem solving. Prerequisite: High School Plane Geometry. 4 credits
- 526 **Advanced Geometry.** Selected topics; projective geometry; Non-Euclidan geometry; Topology. Prerequisite: Mathematics 425. 3 credits
- 529 **Probability and Statistics.** Elementary probability, permutations and combinations; normal distribution; sampling methods; regression and correlation, linear and curvilinear; chi-square distribution; index numbers; time series; variance. 4 credits
- 530 **Advanced Statistics.** Recent developments in application of statistics in the social sciences, business administration, governmental affairs, research, and general culture. Curve fitting, linear correlation, multiple correlation, tests of hypothesis, analysis of time series, analysis of variance, sampling and sample surveys, statistical quality control. Prerequisite: Mathematics 330 or 429-529. 4 credits
- 532 **Calculus III.** Partial derivatives; multiple integrals; infinite series; expansion of functions; differential equations. Prerequisite: Mathematics 224 or 332. 4 credits
- 533 **Advanced Calculus.** More advanced aspects of partial differentiation, multiple, line and surface integrals with applications; Gamma Beta, Bessel and elliptic functions; Fourier series. Prerequisite: Mathematics 432. 4 credits
- 534 **Differential Equations.** Separable, homogeneous, and exact equations; linear equations, solutions by use of series; applications to physical problems. Prerequisite: Mathematics 243 or 332. 4 credits
- 535 **Higher Mathematics for Scientists.** Vector addition and multiplication, differential operations in curvilinear coordinates, Stokes theorem, Gauss' theorem, complex variables, harmonic analysis and boundary value problems. Prerequisite: Mathematics 244 or 332. 4 credits.
- 540 **History of Mathematics.** Historical survey of mathematical development and contributions from beginning to present time. Prerequisite: Mathematics 226 or 241. 4 credits
- 556 **Mathematics Seminar.** 3 credits

## **Courses for Graduate Students Only**

- 521 **Modern Algebra.** Congruences, polynomials, number systems, Boolean algebra, groups, matrix theory, fields, rings, and ideals. 3 credits
- 542 **Functional Mathematics for Secondary Teachers.** Professionalized subject matter intended to broaden and deepen the teacher's knowledge of mathematics. 4 credits
- 555 **Foundations of Mathematics.** The nature of geometric systems; modern mathematical systems; real number systems; sets; Boolean algebra; logic and philosophy. 3 credits
- 560 **Problems in Teaching of Mathematics.** Those encountered by both elementary and secondary school teachers. Limited to students with teaching experience. 3 credits

## **BIOLOGY**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Biology. 1-4 credits
- 502 **Modern Biological Concepts.** General education course in which modern concepts in physiology, genetics, and ecology are developed through selected laboratory experiences, reading, and discussion. Not open to students with majors or minors in biological sciences. 2 hrs. Lecture and Disc., 2 hrs. Lab. 3 credits
- 503 **Field Study and Regional Interpretation.** General education field course in regional interpretation involving study of glaciation and soils, vegetation, and animal life, and the roles of factors in determining the potentialities of the region. Not open to students with majors or minors in the biological sciences. 1 hr. Disc., 6 hrs. Field and Lab. 4 credits
- 541 **Ecology.** Interactions of living things with their environment; field studies of deciduous forest, coniferous forest, grassland, sand plain, and rock communities; succession; biological bases for land use planning and management; vegetation regions of United States. Prerequisites: Zoology 242, Botany 247. 4 credits
- 543 **Genetics.** Principles of inheritance and variation; application of genetic principles in improving domestic plants and animals; human inheritance and social problems. Prerequisite: 8 hours Biological Sciences. 4 credits
- 545 **General Physiology.** Cellular metabolic processes in relationship to total body functions. Prerequisites: Zoology 241 and Chemistry 212. 4 credits
- 548 **Aquatic Biology.** Lakes and streams, their physical environment, their plant and animal life, and dynamic interrelations. Prerequisite: Zoology 242, Botany 246. 4 credits
- 549 **Problems of Resource Management.** Conservation problems; interrelationship and management of resources; agencies involved; conservation literature. Laboratory. Prerequisite: 8 hours Biological Sciences. 4 credits

### **Course for Graduate Students Only**

- 547 **Ecology Problems.** Individual study of biological aspects of a locality aiming at better understanding of biological resources and problems of community and their greater utilization in teaching. Prerequisite: Biology 441 or 541. 2-4 credits



## **BOTANY**

### **Course for Advanced Undergraduate and Graduate Students**

- 546 **Systematic Botany.** Advanced taxonomic principles; individual experience in collecting, pressing, identifying, and mounting flowering plants. Laboratory. Prerequisite: Botany 247 or 345. 2-4 credits

## **CHEMISTRY**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Chemistry. 1-4 credits
- 511 **Advanced Inorganic Chemistry.** Theoretical approach to, and aspects of, inorganic chemistry. Prerequisite: Two years of Chemistry. 4 credits
- 521 **Organic Chemistry.** Aliphatic, aromatic, and heterocyclic compounds of carbon. 5 credits
- 522 **Quantitative Analysis.** Volumetric and gravimetric methods of greater complexity and finer techniques than those presented in Chem. 325; includes some instrumental analysis. Prerequisite: Chemistry 325. 4 credits
- 523 **Qualitative Organic Analysis.** Identification of several single and mixed organic compounds by physical and organic qualitative methods. Prerequisite: Chemistry 322. 4 credits
- 525, 526, 527 **Physical Chemistry.** Application of fundamental laws and theoretical principles to gases, liquids, solids, solutions, and colloids; mass law; phase rule; electrochemical problems. Prerequisite: Chemistry 325, Physics 233, and Calculus I. 4 credits each

## **PHYSICS**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Physics. 1-4 credits
- 531 **Modern Physics.** Maxwell's equations; electromagnetic waves; radiation from accelerated charge; thermal radiation; Planck's radiation law; Boltzmann's distribution; relativity. Prerequisite: Physics 331 and Math. 432, or equivalent. 3 credits
- 532 **Modern Physics.** Schroedinger wave equation and solutions for some simple cases; eigenfunctions; hydrogen atom; atomic spectra; molecular spectra. Prerequisite: Physics 331 and Math 432, or equivalent. 4 credits
- 533 **Modern Physics.** Energy bands in solids; theories of electrical and magnetic properties of solids; semi-conductors; the nucleus; nuclear reactions; cosmic rays. Prerequisite: Physics 331 and Mathematics 432 or equivalent. 3 credits
- 537 **Theoretical Physics.** Electrostatics; Gauss' law; Poisson's equation; Leplace's equation; dielectric theory; electric current; Biot Savart law; Maxwell's equations; Poynting vector; electromagnetic waves. Prerequisite: one year college physics and Mathematics 434. 4 credits

## **SCIENCE**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Science. 1-4 credits

**501 Major Developments in the Physical Sciences.** General education course employing selected science experiences as a basis for explanations of major developments in area of physical science; their significance. Not open to students with majors or minors in physical science. 2 hrs. Dis., 4 hrs. Lab. 4 credits

**520 Seminar.** Lectures, readings, discussions on selected topics. 1-4 credits

### **Course for Graduate Students Only**

**510 Science Colloquium.** Individual study and reporting of selected specific science topics. 1 credit per quarter

## **SCIENCE EDUCATION**

### **Courses for Advanced Undergraduate and Graduate Students**

**508 Physical Science Techniques.** Construction, repair, and calibration of laboratory instruments and demonstration devices; preparation and standardization of solutions; checking balances; simple glass blowing techniques; apparatus assembly and checking. Prerequisite: Two years of physical science. 2 credits

**509 Biological Science Techniques.** Collection, preparation, and display of biological materials, including the making of slides and plastic mounts and some work in taxidermy; other working techniques useful to biology teachers. Prerequisite: Biology 242 and 246. 2 credits

**551 Teaching Science in Elementary Schools.** Contributions which can be made through science toward meeting personal and social needs during childhood; integration of science experiences into program of elementary education; methods, materials, books, and other teaching helps. Prerequisite: Science 324 or consent of Division. 3 credits

**555 Workshop in Conservation and Conservation Education.** Wide range of experiences designed to help teachers plan and implement teaching of conservation: curriculum planning, group work, conferences, demonstrations, lectures, field trips, and evaluation of audio-visual aids. Conducted by the Department of Science and Social Studies. 4 credits

### **Courses for Graduate Students Only**

**504 Seminar in Elementary Science Problems.** Individual and group study of problems connected with teaching elementary science and development of a functional science program at elementary level; analysis and use of researches in elementary science education. 4 credits

**552 Workshop for Science Teachers.** Work on curricular or teaching problems in science by individuals or groups of teachers desiring to improve science programs. Experiences will be varied according to needs and problems of registrants who will have opportunities to utilize services of various staff members. 4 credits

**553 Problems in Teaching Junior and Senior High School Science.** Analysis of high school science courses in light of social and personal needs and changing conditions; use of research findings in improving science instruction; survey and use of resources in science teaching; adjustment to differences in interests, aptitudes, and vocational goals; evaluation. Prerequisite: A major or minor in science. 4 credits

## **ZOOLOGY**

### **Course for Advanced Undergraduate and Graduate Students**

**542 Embryology.** Prenatal development of human body; laboratory emphasis on chick and pig. Laboratory. Prerequisite: Zoology 242. 4 credits

# Division of Psychology

Mr. Clugston, Mr. Gilbert, Mr. Ingwell, Mr. Krueger,  
Mr. Lohmann, Mr. Luker, Mr. Markwardt, Mr. R. Nash,  
Mr. Peterson, Mr. VanNostrand, Mr. Slobetz, Chairman

## Courses for Advanced Undergraduate and Graduate Students

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Psychology. 1-4 credits
- 564 **Principles and Practices of the Guidance Program.** Philosophy of guidance, individual appraisal, counseling services, informational services, placement organization, group guidance activities, staff service and contributions, and program organization and administration. 3 credits
- 566 **Guidance for the Handicapped.** Special problems of guidance services for the handicapped child; effective counseling techniques with children and parents; role of psychological, aptitude, and achievement tests in appraising abilities and maturity levels. Prerequisite: Ed. 471-571. 3 credits
- 568 **Advanced Tests and Measurements.** Theory and practice in education testing and measurement. Critical examination of intelligence, aptitude, interest, personality, and achievement tests; recent developments in assessment of school learning. Prerequisite: Psy. 463 or equivalent. 3 credits
- 571 **Mental Hygiene.** Characteristics of wholesome personality; reading, discussion, and observations to train the prospective teacher in methods and aims of mental hygiene; emphasis on both personal development and techniques of effective adjustments in the teaching situation. Prerequisite: Psychology 262. 3 credits
- 572 **Psychology of Exceptional Children.** Study and clinical observation of children who have special problems of growth and development; physical and mental handicaps; mentally gifted; behavior disorders. Prerequisite: Educ. 471-571. 3 credits
- 573 **Psychology of Mental Retardation.** Etiology of mental retardation; characteristics of mental defectives; classification, diagnosis, and assessment; social control of mentally retarded; role of family, school, and community agencies. Implications for education. Prerequisite: Ed. 471-571. 3 credits
- 575 **Abnormal Psychology.** Types of functional and organic deviations of psychic activity for understanding normal behavior of human personality with greater clarity and precision. 3 credits
- 576 **Clinical Psychology I.** Clinical appraisal and diagnosis by use of psychological tests; varieties of behavioral, organic, and age group problems in clinical setting. Prerequisite: Psychology 475-575. 3 credits
- 577 **Clinical Psychology II.** Treatment procedures and methods in clinical problems; clinical diagnostic procedures; theoretical approaches to psychotherapy. Prerequisite: Psychology 476-576. 3 credits
- 583 **Senior Seminar, History of Psychology.** The great systems, experiments, and personalities in development of modern psychology. 2 credits
- 584 **Senior Seminar, Schools of Psychology.** Current systems or schools of psychology, with a comparative study and critical analysis of each; contributions of outstanding persons in each of the schools. 2 credits

- 585 Theory of Personality Structure.** Basic theoretical concepts, factors of vital relationships within the individual personality, interpersonal relationships, individual and field frames of reference as they relate to mental health. 3 credits
- 586 Psychometric Technique Binet.** Measurement of intelligence by means of the Stanford revision of the Binet-Simon technique; demonstrations, lectures, practice in administration of tests; observation of individual by instructor. Admission by Division approval. 8 hours laboratory. 3 credits
- 587 Psychometric Technique Wechsler.** Measurement of intelligence by means of the Wechsler Adult Intelligence Scales, Wechsler Intelligence Scale for Children, and Wechsler Intelligence Scale for Adults and Adolescents, administering, scoring, and interpreting results. Admission by Division approval. 8 hours laboratory. 3 credits.

### **Courses for Graduate Students Only**

- 563 Theories of Learning.** Principles of psychology of learning and experimental findings; application to problems encountered in teaching and learning; examination of theories of learning. Prerequisite: Comm. 500, or taken concurrently. 3 credits
- 578 Statistical Methods in Education and Psychology.** Statistical techniques for reducing, describing, and comparing data; sampling theory, correlation theory, tests of reliability, testing hypotheses; use of these techniques in test interpretation and educational research procedure. Prerequisite: Psy. 463 or equivalent. 3 credits
- 581 Psychology of Elementary School Teaching.** Recent investigations and reports in subject-matter fields or areas from standpoint of basic concepts and research in child development and implications for instruction. Prerequisite: Experience in elementary school teaching. 3 credits
- 590 Appraisal Techniques.** Analysis of appraisal techniques used in Guidance and Counseling. Information, sources, assembly, and use in the counseling process. Prerequisite: Psychology 464-564. 3 credits
- 591 Group Guidance Procedures.** Group procedures and their use in the total guidance program for the high school. Combined with the use of occupational and educational information materials. Taken concurrently with 592. Prerequisite: Psychology 464-564. 3 credits
- 592 Occupational and Educational Information.** Occupational and Educational information and materials. Sources, evaluation, collection, and filing of occupational and educational information and materials, proper use and place in total guidance program. Prerequisite: Psychology 464-564. 3 credits.
- 593 Counseling Procedures.** Various approaches in counseling, practice in interviewing, concepts of therapy, analysis of attitudes in counseling. Prerequisite: Psychology 590. 3 credits
- 594 Supervised Practicum in Counseling.** Supervised practicum as counselor in a program of counseling, testing, and related personnel work. Prerequisite: Psychology 593 and Division approval. 3 credits
- 595 Organization and Administration of the Guidance Program.** Problems of organization and administration, interrelationships with administrative, teacher personnel, and other school functions. 3 credits
- 596 Supervised Practicum in Rehabilitation Counseling.** Prerequisite: Psychology 593 and Division approval. 3 credits

# Division of Social Sciences

Mr. R. Brown, Mr. Cates, Mr. Davis, Mr. Folkerts,  
Mr. Gower, Mr. Holloway, Mr. Lieberman, Mr. Lohrman,  
Miss Morse, Mr. Netzer, Mr. Pike, Mr. Riggs,  
Mr. Harris, Chairman

## ECONOMICS

### Courses for Advanced Undergraduate and Graduate Students

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Economics. 1-4 credits
- 501 **Monetary, Banking, and Fiscal Policy.** Dynamics of flow of expenditures and income and their impact upon national income and price levels, with appropriate consideration of possible stabilization controls. Prerequisite: Economics 272. 3 credits
- 570 **Business Cycles and Forecasting.** Factors causing fluctuations in business activity and national income; proposed methods of stabilization; business forecasting techniques. Prerequisite: Economics 272. 3 credits
- 571 **Money and Banking.** A study of the monetary and banking system of the United States; the nature of bank credit, operation of the individual bank and its relation to banking system, Federal Reserve System, central bank policy, and relationship between bank credit, money, and price levels. Prerequisite: Economics 272. 4 credits
- 573 **Labor Economics.** Labor as a factor of production; growth of collective bargaining and labor legislation, with their attendant effects upon society. Prerequisite: Economics 272. 4 credits
- 574 **International Economics.** International economic relationships and their effects upon domestic and foreign economies; commercial and financial policies; tariffs, exchange controls, international monetary standards, and institutions established to facilitate international settlements. Prerequisite: Economics 272. 2 credits
- 576 **Economic Analysis.** Economic processes of free enterprise system, pricing under various conditions, capital formation, and theory of employment. Prerequisite: Economics 272. 3 credits
- 577 **Business Economics.** Economic analysis as an aid in business management and control. Prerequisite: Economics 272. 3 credits
- 578 **History of Economic Thought.** Development of economic thought and analysis from Adam Smith to present. Prerequisite: Economics 272. 4 credits

## GEOGRAPHY

### Courses for Advanced Undergraduate and Graduate Students

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Geography. 1-4 credits

- 501 **Research or Readings in Topical Geography.** A seminar or conference course for students wishing to work on some phase of this subject. Credits and hours arranged. 1-4 credits
- 502 **Research or Readings in Regional Geography.** A seminar or conference course for students wishing to work on the geography of a particular region of the world. Hours to be arranged. 1-4 credits
- 505 **Cartography.** Map making and construction; work with map making tools. Topical. 4 credits
- 574 **Meteorology-Climatology.** Atmosphere, weather, instruments used in gathering climatic data, weather maps and weather forecasting. Topical. 4 credits
- 576 **Geography of Africa.** Physical geography, resources and people of various regions of Africa related to economic stage and possibilities for future development. Regional. 4 credits
- 586 **Political Geography.** Geographical strengths and weaknesses of the Great Powers which influence changes in the world today. Topical. 4 credits
- 589 **Development of Geographic Thought.** Main currents from ancient Greece to present; basic ideas behind division of geography into regional and systematic categories. Topical. 4 credits
- 590 **Urban and Transportation Geography.** Geographic causes for growth and demise of world's trade cities and trade routes; kinds of carriers of world and American trade. Topical. 4 credits
- 598 **Geography of Middle America.** Geographic analysis of Mexico, Central American countries, and West Indian Islands. Regional. 4 credits

## **HISTORY**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in History. 1-4 credits
- 517 **French Revolution and Napoleon.** Course of a revolution and origin of many modern ideas and institutions. 3 credits
- 518 **American Colonial History.** Development of Colonial institutions: religious, economic, and political, and their influence on the Revolution. 3 credits
- 536 **Middle East.** National, religious, and geographic forces which have made this area a center of unrest and power struggle today. 2 credits
- 537 **Two World Wars, 1912-1953.** Major events and trends comprising global history from 1912 to present. 4 credits
- 538 **History of the West.** How frontier environment, continuously present from colonial beginnings to 1890, basically affected development of American history. 3 credits
- 542 **Recent American History, 1912 to Date.** Emergence of the United States as a world power with emphasis on interplay of domestic and foreign policies. 4 credits
- 548 **Social Forces in American History.** Historical development of American thought-exact, speculative, and popular-and its interrelationship with the social environment. 3 credits



- 550 The Liberal Movement.** Rise of liberal political thought and practice, its capitulation before conservative, fascist, and communist forces, with consideration of prospect for liberalism in the contemporary world. Prerequisite: History 245. 3 credits
- 555 Foreign Relations of the United States, 1775-1898.** American foreign policy; fundamental principles; neutral rights, Monroe Doctrine, influence of sectional policies on foreign affairs; the War between the States and its effects on American diplomacy. 4 credits
- 556 Foreign Relations of the United States, 1898 to Present.** United States as a great power; its diplomatic policies in connection with two great wars and their aftermath. 4 credits
- 557 Soviet Union.** From 1917 to present; revolution in theory and practice; five-year plans; structure of the Soviet state; Communist Party and its socialist culture; Soviet state in relation to Western Europe and Asia. 3 credits

### **Courses for Graduate Students Only**

- 551 Readings in American History.** Guided study of American History through individual investigation of special periods and topics. 2 credits
- 552 Historiography.** Significant historians and historical theory; problems in presentation of historical interpretation. 2 credits
- 553 Readings in European History.** Guided study of European history through individual investigation of special periods and topics. 2 credits

## **POLITICAL SCIENCE**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Political Science. 1-4 credits
- 582 International Organization.** History and development of the community of nations; organization and authority of League of Nations; United Nations and its auxiliary components. Prerequisite: Political Science 281. 3 credits
- 585 Social Legislation.** Federal, state, and local laws and regulations covering protective and control measures in social problems of health, safety, social insurance, child labor, advertising, pure food and drugs, old age benefits, and others. Prerequisite: Political Science 281. 3 credits
- 586 Political Parties.** American party system, its structure, practices, and policies as found in caucus, convention, campaign, and election procedures. Prerequisite: Political Science 281. 2 credits
- 587 Legislative Process.** Problems connected with democratic legislature. Typical example: influence of committees; political party influence; pressure groups. Prerequisite: Political Science 281. 2 credits
- 589 American Political Thought.** Philosophy which underlies our American system of democratic government; political theories which have contributed to formation of our system of government. Prerequisite: Political Science 281. 2 credits

### **Course for Graduate Students Only**

- 501 The Western Political Heritage.** Development of political thought, with emphasis upon background of modern democratic principles. Prerequisite: Political Science 281. 3 credits

## **SOCIOLOGY**

### **Courses for Advanced Undergraduate and Graduate Students**

- 500 **Special Problems.** A seminar or conference course for advanced students wishing to work out a special problem in Sociology. 1-4 credits
- 561 **Development of Western Social Thought.** Significant contributions of social thinkers and philosophers from ancient times to present. Prerequisite: Sociology 260. 4 credits
- 562 **Seminar.** Discussion, readings, evaluation of sociological theory, social issues, or contemporary events. A specific topic selected each time offered. 1-4 credits (May be repeated.)
- 564 **School and Community.** Community structure, institutions and life; relationship between community and personality growth; school and community relationship; the community school; youth and community surveys; the coordinating council. Prerequisite: Sociology 260. 3 credits
- 565 **Social Psychology.** Influence of human relations and culture upon development of personality; comparative study of biological, ethnological, and culture approaches to individual, sex, and racial differences; development of attitudes and prejudices; study of propaganda, rumor, and other psycho-social phenomena. Prerequisite: Sociology 260. 4 credits
- 567 **Cultural Anthropology.** Culture: its meaning, analysis, changes; cultural differentiation; significance of culture in human relations; insights and concepts necessary for understanding and promoting intercultural relations; primitive and modern advanced cultures. Prerequisite: Sociology 260. 4 credits
- 568 **Ethnic Relations.** Problems arising from ethnic differentiation, such as cultural background, religion, and race. Prerequisite: Sociology 260. 3 credits
- 570 **Social Control.** Social and cultural processes and techniques by which persons are taught, persuaded, or compelled to conform to norms and values of groups. Prerequisite: Sociology 260. 3 credits
- 571 **Culture and Personality.** Personality development in context of cultural patterns for behavior in both preliterate and modern societies. Prerequisite: Sociology 260. 2 credits

## **SOCIAL STUDIES**

### **Courses for Advanced Undergraduate and Graduate Students**

- 510 **Field Work.** Summer field study of a selected region of the United States from the viewpoint of one or more of the social studies; to include pre-trip and post-trip work. 8 credits
- 555 **Workshop in Conservation and Conservation Education.** Wide range of experiences designed to help teachers plan and implement teaching of conservation: curriculum planning, group work, conferences, demonstrations, lectures, field trips, and evaluation of audio-visual aids. Conducted by the Departments of Science and Social Studies. 4 credits
- 572 **Methods in Social Research.** Philosophy of science as related to formulation of research problems; techniques for collecting and analyzing social data; interpreting results. 2 credits

### **Course for Graduate Students Only**

- 501 **Social Studies Seminar.** World in Twentieth Century in geography, history, economics, political science, sociology, and anthropology. 3 credits

# Non-Divisional Offerings

## GREAT ISSUES

### Courses for Advanced Undergraduate and Graduate Students

501, 502, 503 Organized around a different theme each year. Emphasis on interdisciplinary approach to significant problems and important issues. Offered jointly by St. Cloud State College, St. John's University, and the College of St. Benedict. Open to students by invitation. 2 credits per quarter for three consecutive quarters for total of 6 credits.

## PHILOSOPHY

### Courses for Advanced Undergraduate and Graduate Students

540 History of Philosophy. Development of philosophic ideas and intellectual forces which have influenced men's minds and shaped institutions in the Western World, studied with reference to developments in literature, political and social structure, and natural sciences. 3 credits

541 Living Religions of the World. Comparison of some basic ethical, philosophical, and theological concepts adhered to by 20th century religions; some examination of the place of religious dogma in the present time. 3 credits

542 History of American Philosophical Thought. Tracing of the course of development of American philosophy from its beginnings: Puritanism, Transcendentalism, Idealism, Pragmatism, and other concepts, leading to consideration of major contemporary concepts. 3 credits

Cover Design by Allan N. Meyer

